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ABSTRACT

This report presents results of a study investigating the process used by the Board of Regents (BOR) for developing its legislative budget request, as well as the process used by the BOR for allocating appropriations among the universities. The report also includes an assessment of the extent to which funds are allocated on an equitable basis for comparable programs across the State University System (SUS), including the special unit entities. The three major components of the study are as follows: (1) Operating Budget: Comparison of Generation Formulas Used by the SUS and the Legislature; (2) Operating Budget: Equity of the Allocation Among the Nine Universities and the Special Units; and (3) Capital Outlay Budget; the report contains separate chapters on each of these topics as well as other related issues. In addition, recommendations are presented for the BOR, the Postsecondary Education Planning Commission, and the Florida Legislature to consider as they refine the SUS funding process. Appendices contain an historical analysis of funding variations; tables showing summary allocations of appropriations of fiscal years 1981, 1986, and 1991, by university, allocation component and student; and a list of the differential treatment of universities based on policies in the simulated allocation of 1990-1991 education and general appropriation. (GLR)

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AN ANALYSIS OF THE PROCESSES USED TO FUND THE STATE UNIVERSITY SYSTEM OF FLORIDA

A Study Prepared for the

POSTSECONDARY EDUCATION PLANNING COMMISSION

by

MGT OF AMERICA, INC.

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TECHNICAL REPORT FOR THE COMMISSION'S 1992 - REPORT 1
STATE UNIVERSITY FUNDING PROCESS

HE025 357

December 23, 1991

BEST COPY AVAILABLE

AN ANALYSIS OF THE PROCESSES USED TO FUND THE STATE UNIVERSITY SYSTEM OF FLORIDA

A Study Prepared for the

Postsecondary Education Planning Commission

by

MGT Of America, Inc.
2425 Torreya Drive
Tallahassee, Florida 32303

December 23, 1991

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1.0 BACKGROUND AND PURPOSE

1.1 Legislative Proviso

During the 1991 session of the Florida Legislature, concerns were expressed about whether each university in the State University System (SUS) -- and FAMU in particular -- was being treated fairly by the funding processes used by the Legislature and the Board of Regents. This current concern about funding equity is similar to the ones expressed by proponents of other universities (including UCF) in the mid 1980s. However, the current issues go beyond the equity of the allocation of the Educational and General budget (the prior concern) and consider issues related to the request budget, the fixed capital outlay budgeting process, and the treatment of special unit budget entities.

In order to compile more complete information on the funding process and its effects, the Legislature included the following proviso in the General Appropriations Act which directed the Postsecondary Education Planning Commission (PEPC) to:

> *... conduct a study of the process used by the Board of Regents for developing its legislative budget request as well as the process used by the Board of Regents for allocating appropriations among the universities. As a part of this study the Postsecondary Education Planning Commission shall evaluate the legislative formulas within the Board of Regents new funding methodology. These generational formulas shall be compared to actual expenditures. The study shall include an assessment of the extent to which funds are allocated on an equitable basis for comparable programs across the State University System, including the special unit entities. The study shall also assess the extent to which the need for facilities is being addressed on an equitable basis for each university. To the extent that necessary supporting data are available, the study shall examine allocation patterns and practices over a period of years. All supporting information provided as a result of this study shall be reviewed by the Office of the Auditor General. The Postsecondary Education Planning Commission shall submit a report of its findings to the Governor, the President of the Senate and the Speaker of the House of Representatives by January 15, 1992.*

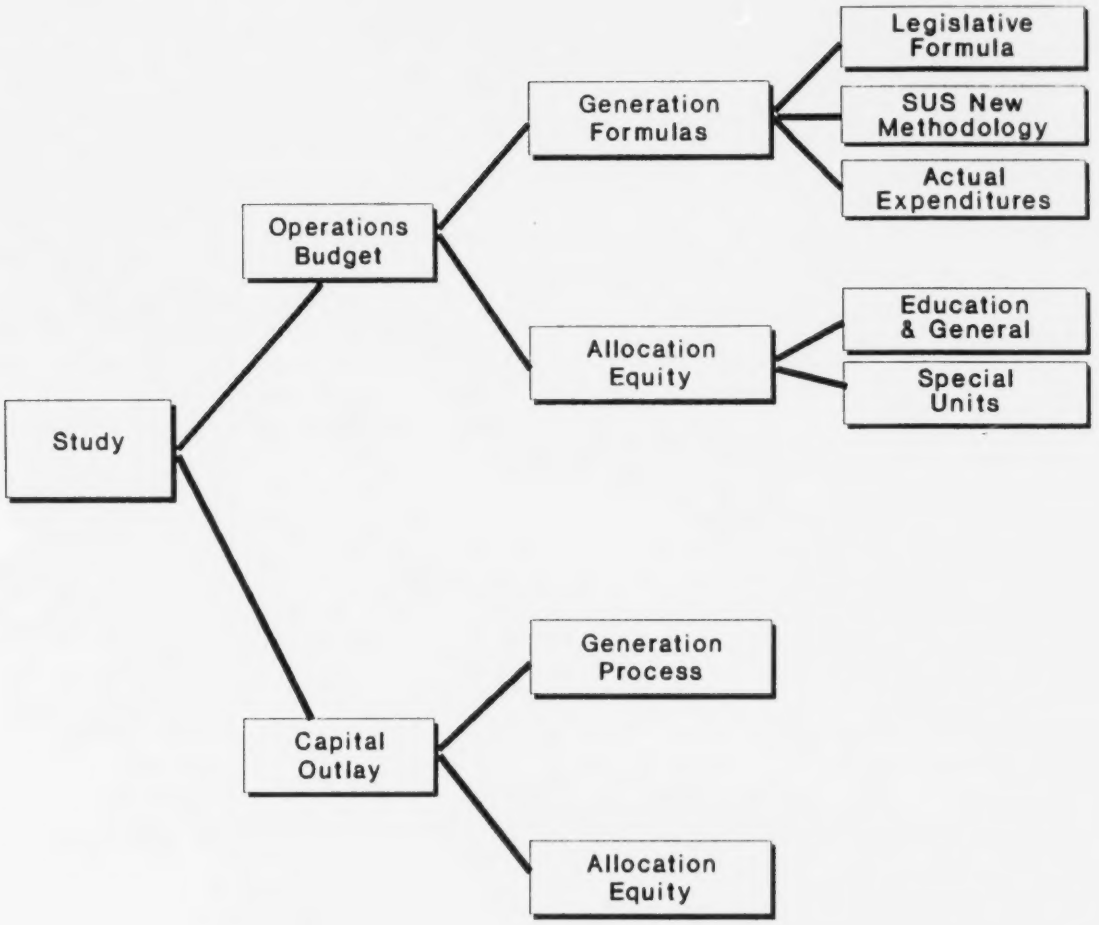
The specifics of the proviso language cover a number of interrelated topics concerning the budgets both for operations and fixed capital outlay.

The tree diagram in exhibit 1 shows how the various components of the proviso relate to one another. The three major components of the study are:

- Operating Budget: Comparison of Generation Formulas Used by the SUS and the Legislature
- Operating Budget: Equity of the Allocation Among the Nine Universities and the Special Units
- Capital Outlay Budget

Exhibit 1

Relationship of Issues in SUS Funding Study



The following report contains separate chapters on each of these topics as well as other related issues.

1.2 The Broader Interest of PEPC

The Planning Committee of PEPC was assigned responsibility for carrying out the study on behalf of the Commission. To assist in fulfilling the mandates of the proviso language, PEPC retained the services of MGT of America, Inc., which has an extensive background in higher education finance and facilities planning. The Planning Committee reviewed analyses prepared by the Commission staff and the consultant and heard testimony from representatives of the Legislature, the SUS central office staff and the universities.

In reviewing its charge, the Planning Committee decided to undertake a comprehensive review of funding for the State University System. While its study would respond to the specific interests of the Legislature, the Planning Committee also directed its staff and the consultant to consider other related funding issues that might contribute to a more effective and efficient postsecondary education system for the citizens of Florida.

2.0 OVERVIEW OF SUS FUNDING PROCESSES

2.1 State of Florida Budgeting System

The initial step in the annual budget cycle for all state agencies in Florida is the development of a legislative budget request. The request is prepared in response to instructions from the Governor. The Governor is the chief budget officer of the state and is required by law to provide budget recommendations to the Legislature. The Office of Planning and Budgeting provides budget analyses for the Governor and is responsible for preparing the Governor's budget recommendations based upon the agencies' requests, the Governor's priorities, and revenue limitations. The Governor conducts budget hearings and sets priorities with each department head prior to the submission of the formal budget recommendations. Many large agencies are comprised of several budget entities and a separate request is prepared for each budget entity.

The foundation of the state request process is the budget base, which is the amount of money appropriated in the current fiscal year. Each state agency begins its legislative budget request with the "cost to continue" current programs and builds upon that amount with requests for improved programs and new programs. The budget instructions specify how to incorporate such factors as workload increases, salary increases, and inflation adjustments in determining the cost to continue.

Within the cost to continue, improved programs and new programs categories, more specific budget details reflect program components and appropriation categories. The four major appropriations categories are:

- salaries and benefits (permanent personnel)
- other personnel services or OPS (temporary personnel)
- operating capital outlay or OCO (equipment and furnishings)
- operating expenses (supplies, travel, contractual services, etc.).

The program components typically vary by agency.

The legislative budgeting process is carried on at the committee level, and both the Senate and the House of Representatives develop their own version of the General Appropriations Act. Each appropriations committee operates through subcommittees, with each responsible for different functional areas of state government. Staff for the appropriations committees analyze agency budget requests and the Governor's budget recommendations and then prepare alternative budget recommendations.

Final development of the appropriations bill occurs in the Conference Committee, and the final document is built through compromise among the specialized subcommittees to resolve differences between the two chambers. Appropriations staff prepare a final Conference Committee Report for adoption by the entire Legislature. The Governor has final approval of all bills passed by the Legislature, and can veto any specific appropriation in the General Appropriations Act. Once the appropriations act is signed into law, each agency allocates the appropriation for each budget entity among the various units for which the funding was intended.

2.2 Identification of Various SUS Budget Groups

Most state-funded activities in the State University System fall under one of three major sets of budget entities:

- Educational and General (E&G) -- $1,030 million
- Fixed Capital Outlay -- $109 million
- Special Units[1] -- $284 million

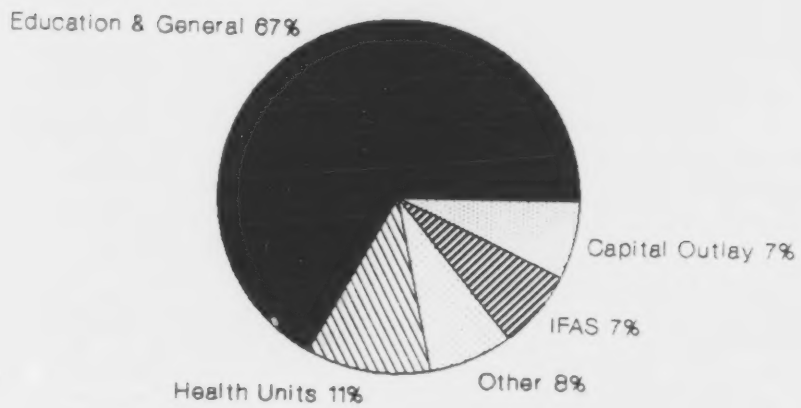
Exhibit 2 illustrates the relative size of these major budget entities in the 1990 fiscal year. Each of these entities is funded differently.

SUS appropriations come both from internal collections, e.g., student tuition and fee revenues, and four major state revenue sources:

- the General Revenue Fund
- the Educational Enhancement Trust Fund (Lottery proceeds)
- the State Infrastructure Fund
- Gross Receipts Tax

Exhibit 2

SUS Funding by Budget Group
1989-90 Fiscal Year



[1]Effective with the 1991-92 appropriation, the SUS was granted lump-sum authority. Under this authority, the special units became program components within the E&G budget entity.

The General Revenue Fund and the Educational Enhancement Trust Fund are primarily appropriated for operating budgets. Approximately 50% of all state taxes, licenses, fees, and other operating receipts are credited to the General Revenue. Appropriations to the SUS from General Revenue are devoted almost exclusively to cover the annual, ongoing costs of operations. A minimum of 35% of the total collections from the sale of state lottery tickets is dedicated to the Educational Enhancement Trust Fund, which is available to public schools, community colleges, and universities to enhance the quality of programs beyond that which would be possible with only General Revenue funding.

The State Infrastructure Fund and the Gross Receipts Tax are primarily appropriated for fixed capital outlay. The State Infrastructure Fund consists of an annual distribution of a portion of total sales tax collections and documentary stamp tax collections. A portion of these funds is transferred to the Public Education Capital Outlay (PECO) fund. The Gross Receipts Tax is levied on the gross receipts of electric, gas, and telecommunications utilities and is the major source of revenue for PECO. PECO funds are dedicated to facility planning, construction, equipment, and repair and renovation at the state's public schools, community colleges, and universities.

Student matriculation and tuition fees comprise the majority of dollars contributed by students to the SUS. Both fees, along with application and late registration fees, are remitted to the Incidental Trust Fund which is allocated among the universities by the Board of Regents (BOR). The BOR sets the specific tuition and matriculation fees in an amount sufficient to equal the total matriculation and tuition fee revenues which are established annually in the General Appropriations Act. Students are also assessed a building fee and capital improvement fee that is used by the BOR for debt service on capital projects, and other fees for student health services and athletics.

The SUS also operates substantial programs that are not directly funded by the state. Major examples include:

- auxiliary enterprises, e.g., residence halls, food service, book stores, etc.;
- contracts and grants, typically for sponsored research and service programs;
- teaching hospitals.

The funding of these activities is not the focus of the current study.

2.3 E&G Budget Funding Process

The Education and General (E & G) budget entity covers the ongoing costs of operations for most state-funded programs at the nine state universities. Appropriations are requested and allocated by program component, including:

- instruction and research
- plant operation and maintenance
- administrative direction and support services

- student services
- libraries

Some components are budgeted with reference to a formula while the needs of other components are reviewed on an incremental needs basis.

The BOR bases its budget priorities features on the State University System of Florida MASTER PLAN 1988 Through 1992-93, which was adopted by the Board in 1988. The Plan identified four priority goals to guide the State University System:

1. Improve the quality of undergraduate education.

2. Solve critical problems in a rapidly growing state.

3. Forge public-private partnerships to help the State University System achieve its goals.

4. Develop and implement creative and innovative cost-saving programs to increase efficiency without sacrificing quality.

These goals are the purposes for which resources are budgeted and spent by each of the nine universities in the System.

2.4 Special Unit Budgets Funding Process

Several major program activities located at two of the universities have been funded outside the E&G budget entity. Prior to the 1991-92 fiscal year:

- the Institute for Food and Agricultural Sciences (IFAS)
- the Health Sciences Center at the University of Florida (UF)
- the Medical Center at the University of South Florida (USF)

were designated Special Units. Funding for each of the Special Units has been requested, appropriated and allocated as a separate budget entity.

The IFAS component includes instruction and research undertakings within the College of Agriculture, the School of Forest Resources and Conversation, various institutes and research centers, and the Agricultural Extension Service. The UF Health Center component includes instruction and research undertakings in the colleges of medicine, nursing, pharmacy, health-related professions, dentistry, and veterinary medicine and the teaching hospitals and allied clinics at the J.Hillis Miller Health Center and the Veterinary Medicine Teaching Hospital. The USF Medical Center component includes the instruction and research undertakings within the colleges of medicine, nursing and public health.

Funding needs for the special units are reviewed on a programmatic basis rather than by formula. Although the special units each have a variety of funding sources, including student fees and federal grants and allocations, state general revenue is a significant funding source for each special unit.

2.5 Capital Outlay Budget Funding Process

The primary source of fixed capital outlay funds is the Public Education Capital Outlay (PECO)Trust Fund. Other sources include designated student fees, General Revenue, and the Educational Enhancement Trust Fund.

In the initial phase of the process to obtain PECO funding for new facilities, the nine universities develop a five-year plan for capital projects in which new space needs or remodeling or renovation requirements are identified and placed in priority order. Major projects are requested in three phases: planning, construction, and equipment. Space requirements are projected for a five-year period using a space needs formula. The formula provides for variations in space factors based on campus characteristics as determined by program offerings, level of courses taken by students, library holdings, total positions, and faculty assigned to research.

The five-year project plan and priority list for each university is reviewed at the System level by BOR staff and by a Capital Construction Committee, and serves as the basis for development of the SUS three-year priority list by the BOR within the revenue limits mandated by the Commissioner of Education. The SUS list is updated annually to incorporate new capital projects and the results of previous appropriations. New projects are evaluated for their relative need based on projected space requirements and their relationship to the Master Plan goals. The BOR also includes systemwide requests for funds for critical issues such as safety needs, deferred maintenance needs, and asbestos removal projects.

Non-academic, student-related facilities such as student unions and recreational facilities are most often funded from building and capital improvement fees assessed to students. Student consultation and legislative appropriation action is required to expend this fee revenue. Auxiliary enterprises, such as dormitories and parking facilities, are funded from auxiliary funds such as dorm rent, bookstore revenues, and parking fees.

3.0 COMPARISON OF LEGISLATIVE AND SUS FORMULAS FOR THE E&G BUDGET

Two separate sets of formulas exist for the Educational and General budget entity. The Legislature uses a formula, which was originally developed in 1956, to assess the funding needs of the State University System (SUS) and to establish the amount of the appropriation. The SUS bases its request on a set of formulas created in 1986-87 as part of the New Funding Methodology (NFM) development effort. This chapter compares the purposes and features of the two formulas.

3.1 Purpose of Legislative and SUS Formulas

One of the reasons that two formulas exist is that the needs of the Legislature and the State University System for a funding technique are somewhat different. The legislative budget process primarily deals with the SUS as an entity and not with the individual universities. Therefore, the primary role of the Legislature's formula is to determine the overall funding needs of the System and to provide stable funding across the years. With this purpose, the formula does not need to be able to recognize individual differences among the nine universities.

Although a number of different techniques could be used by the Legislature to determine the total financial needs of the System, a formula is desirable because of its ability to contribute to a predictable funding process over time. A formula ensures that the System's funding needs will be assessed in much the same way from year to year. If the number of students to be taught or the number of square feet to be maintained increases by five percent, for instance, the formula automatically provides five percent more funding in the appropriate budget component.

The legislative budget process actually is a set of several different formula- and judgement-driven components that relate to the different operational functions, e.g., instruction, library, student services, etc. This process has permitted the Legislature to express its priorities about the functional areas where it wants the universities to spend their appropriations. For instance, the Legislature can express its priority for undergraduate education by adopting a lower student-faculty ratio at the lower and upper levels while holding the other formula components constant.

The formula used by the SUS not only needs to provide predictability, it also must serve an additional purpose. The SUS formula is used to allocate the appropriation among the nine universities. Therefore, the SUS formula needs to be coordinated with the System's academic plans and provide appropriate funding to enable the individual universities to work toward their respective goals. This requires a formula that accommodates greater levels of detail than the legislative formula.

A second major characteristic of the SUS formula is that it must be concerned with equity. The formula needs to be able to identify areas where the universities are similar as well as areas where they differ. A mathematical formula provides an ideal way for the Board of Regents to demonstrate that comparable programs at each university are being treated fairly in the budget allocation process.

3.2 Comparison of Formula Elements

The legislative funding process contains nine separate components. Only two of the components are formula-based and the remaining components are based on a subjective analysis of funding needs. The two formula components and their elements are:

- instruction and research (I&R)
  - instruction, at four different levels
  - research, at four different levels
  - public service
  - academic advising
  - academic administration
  - I&R support
- physical plant
  - staffing
  - maintenance expense
  - custodial expense

Funding for all other components is determined by an annual, incremental analysis of need rather than by mathematical factors.

The NFM developed by the SUS also contains the same nine separate components, but five of its components are determined by formula-based methods. The formula elements in the NFM include:

- instruction and research
  - instruction, at four different levels for each of three discipline categories
  - research and public service, for 25 disciplines
  - academic advising
  - academic administration
  - I&R support
- physical plant
  - maintenance staffing and expense
  - custodial staffing and expense
- administrative direction and support
  - student services
- libraries
  - staffing and operations
  - resources

The four remaining components (radios and television stations, museums and galleries, laboratory schools, and institutes and centers) are assessed annually on an incremental basis.

Exhibit 3 compares the two funding processes for Instruction and Research. Not only do the number of I&R formula elements differ between the legislative and NFM formulas, the individual formula variables and funding factors also differ. Even though both formulas have provisions for academic advising, for instance, the legislative formula factor provides more positions than the NFM.

Since the two formulas for instruction and research have different elements and funding factors, the total funding amounts differ. Exhibit 4 compares the differences in the number of positions that are generated under the two formulas using 1990-91 actual enrollments by discipline and level. The legislative formula is more generous at the two undergraduate levels (lower and upper) and for thesis/dissertation supervision and academic advising, but less generous for graduate classroom instruction, research and service, and academic administration. Overall, the legislative formula generates about seven percent more academic positions for the same enrollment than the NFM. The NFM formula factors for academic salaries, however, are more generous and the overall I&R salary amounts are similar. That is, the NFM factors generate fewer, but higher paid, academic positions within the same pool of funds. The NFM also provides for somewhat higher funding rates in the other appropriations categories, especially for Operating Capital Outlay (equipment).

3.3 Comparison with Actual Expenditures

When the NFM was developed in 1986-87, legislative staff expressed concern that the proposed staffing ratios were not based on actual staffing levels nor did they respond to the legislative priority for undergraduate instruction. These concerns certainly contributed to the failure of the Legislature to adopt the NFM.

To determine how well either formula matches actual experience, we analyzed data from the 1989-90 expenditure analysis. This database contains information about FTE production and staffing levels, as well as data on the per credit hour costs at each discipline and level for each university. Comparisons between the expenditure analysis and the two formulas are hindered by two factors:

- the expenditure analysis treatment of graduate instruction focuses on graduate I and graduate II (roughly equivalent to master's and doctoral level) instruction rather than graduate classroom and graduate thesis/dissertation supervision;

- the expenditure analysis includes all academic positions regardless of whether the positions were generated by formula or were appropriated for a special purpose, e.g, institutes and centers, program development.

Exhibit 3

Comparison of I&R Staffing Ratios
Legislative Formula and SUS New Funding Methodology

Formula Component		Legislative Formula	SUS NFM
Position Staffing Ratios			
Instruction -- Student-Faculty Ratios			
Lower Level	*High Intensity*		31.60
	Average Intensity		32.50
	Low Intensity		34.55
	Combined Lower	27.41	33.57
Upper Level	*High Intensity*		24.20
	Average Intensity		25.60
	Low Intensity		26.60
	Combined Upper	20.13	26.00
Graduate Classroom	*High Intensity*		16.25
	Average Intensity		17.35
	Low Intensity		17.35
	Combined Graduate Classroom	19.45	17.12
Thesis/Dissertation	*High Intensity*		6.00
	Average Intensity		7.00
	Low Intensity		7.00
	Combined Thesis/Dissertation	5.59	6.51
Research and Service -- Instructor-Researcher Ratios			
Research	*Lower Level*	12.00	
	Upper Level	12.00	
	Graduate Classroom	3.40	
	Thesis/Dissertation	3.40	
Service		48.00	
	Combined Reserach & Service	6.78	3.87
Academic Advising -- Student-Faculty Ratios		244.00	519.85
Academic Administration -- Faculty-Administrator Ratios		13.00	9.18
I&R Support		2.85	2.80
Funding Rates			
Academic Position Salaries		$62,297	$67,418
Support Position Salaries		23,326	23,326
Other Personal Services per Position		0	1,250
Expenses per Position		5,385	6,241
Equipment per Position		1,050	2,832
Data Processing per Position		423	0

Exhibit 4

Comparison of the Impact of the Formula Application of Alternative I&R Staffing Ratios and Funding Rates

Formula Component		Legislative Formula	SUS NFM
Positions Generated			
Instruction			
Lower Level	High Intensity		238.2
	Average Intensity		53.2
	Low Intensity		534.3
	Combined Lower	1011.2	825.7
Upper Level	High Intensity		521.2
	Average Intensity		132.9
	Low Intensity		1639.9
	Combined Upper	2962.5	2293.9
Graduate Classroom	High Intensity		193.0
	Average Intensity		123.5
	Low Intensity		584.8
	Combined Graduate Classroom	793.0	901.2
Thesis/Dissertation	High Intensity		97.7
	Average Intensity		13.3
	Low Intensity		89.7
	Combined Thesis/Dissertation	233.8	200.7
Combined Graduate		1026.9	1101.9
Total Instruction		5000.5	4221.5
Research and Service			
Research	Lower Level	84.3	
	Upper Level	246.9	
	Graduate Classroom	233.2	
	Thesis/Dissertation	68.8	
Service		104.2	
Total Research & Service		737.3	1096.8
Academic Advising		426.6	269.7
Academic Administration		474.2	608.8
Total I&R Positions		6638.5	6196.8
I&R Support Positions		2329.3	2213.2
Dollars Generated			
Academic Position Salaries		$413,561,539	$417,777,473
Support Position Salaries		54,333,593	51,623,969
Other Personal Services		0	7,746,030
Expense		35,748,574	38,674,378
Equipment		6,970,474	17,549,405
Data Processing		2,808,105	0
Total Dollars Generated		$513,422,285	$533,371,255

In order to compare actual staffing patterns with the corresponding formula-generated amounts, we had to adjust the expenditure analysis results.[2]

Exhibit 5 illustrates the results of this analysis. At the two undergraduate and the thesis/dissertation levels, actual staffing falls below the amounts generated by either of the two formulas. For instance, only 73% of the positions generated by the legislative formula for undergraduate instruction were reported for this purpose in the expenditure analysis. More staff resources were expended on research and service, academic administration, and I&R support than were generated by either formula. The actual amounts for graduate classroom instruction and academic advising fall between the amounts generated by the two formulas.

Exhibit 5

Comparison of Actual Staffing Patterns to Legislative and SUS Formula-Generated Amounts

I&R Formula Element	Expend Analysis	Non-Enrollment Adjustments				Net FTE-Related Actual	Legis Formula	SUS NFM
		Insts & Centers	QIP	Prog Devel	Tech			
Instruction								
Lower Level	907.3		-90.9	-16.9	-4.9	794.6	1011.2	825.7
Upper Level	2405.5		-241.1	-44.7	-13.1	2106.6	2962.5	2293.9
Graduate Classroom	918.5		-92.1	-17.1	-5.0	804.4	793.0	901.2
Thesis/Dissertation	204.6		-20.5	-3.8	-1.1	179.2	233.8	200.7
Research & Service	1939.2	-430.0	-194.4		-10.6	1304.3	737.3	1096.8
Academic Advising	390.5				-2.1	388.4	426.6	269.7
Academic Administration	1020.3			-82.4	-5.6	932.3	474.2	608.8
Total Academic Positions	**7836.1**	**-430.0**	**-639.0**	**-164.8**	**-42.4**	**6559.9**	**6638.6**	**6196.8**
I&R Support Positions	3998.0	-698.3	-472.3	-66.6	-60.1	2329.3	2329.3	2213.2

[2]For the graduate instruction positions, we redistributed the sum of graduate I and graduate II positions in proportion to the NFM ratios for graduate classroom and thesis/dissertation. To adjust for special allocations, we deducted institutes and centers positions from research, quality improvement proportionately from instruction and research, program development positions equally from instruction and academic administration, and technical adjustments proportionately from all I&R elements.

In addition to the analysis of academic staffing by function and level of instruction, we also analyzed how the disciplines were assigned to discipline categories. During the 1990-91 academic year, the SUS recorded student FTE production in 31 separate disciplines. The NFM consolidates the 31 disciplines into only three discipline categories. Our analysis of actual student-faculty ratios in the 31 disciplines (see exhibit 6) shows that at least 15 disciplines have staffing characteristics more similar to a different category than the one to which they are currently assigned. Overall, the high intensity disciplines have a much lower student-faculty ratio than the NFM provides while the average and low intensity disciplines tend toward higher ratios than the NFM recommendations.

The use of only three broad discipline categories in the NFM is an attempt to simplify the formula presentation for instruction. That is, the use of 31 or more disciplines for four levels of instruction, with the resultant 124 student-faculty ratios, might be too unwieldy for easy communication. The practice of discipline grouping is common in the formulas of many other states, as seen in exhibit 7. Of the 12 states that belong to the Southern Regional Education Board (SREB) and use formulas to determine funding requirements for instruction for their universities, the number of disciplines in the instruction formulas ranges from three to 50. The formulas in many of the states tend to recognize about 10-20 disciplines. Obviously, the use of more discipline groupings results in fewer problems of assignment of disciplines to funding categories.

3.4 Consideration of Non-Formula Components

As noted above, the Legislature determines funding for seven components without reliance on a formula. A concern raised by campus budget officials is that the needs of the non-formula components tend to be overlooked in the budget process. To assess this concern, we compared the funding levels by component for three fiscal years spanning the past decade. As shown in exhibit 8, the percentage share of total funding for I&R (the largest formula component) grew from 60% in 1980-81 to 63% in 1985-86 and to 66% in 1990-91. The proportion of funding for administrative direction (the largest non-formula component) declined from 13% to 11% and then to 9%. However, these shifts cannot be attributed solely to formula recognition since the proportion of funding for plant operations and maintenance (a formula component) declined while the share for student services (a non-formula component) increased. Overall, the proportion for the combined formula components increased slightly from 74% to 76% over the ten-year period.

Exhibit 6

Comparison of Actual Student-Faculty Ratios to New Funding Methodology Recommendations

Discipline	Lower		Upper		Grad I		Grad II	
High Intensity Disciplines		*Fits:*		*Fits:*		*Fits:*		*Fits*
Allied Health	11.59	HI	13.43	HI	11.60	HI	10.94	LO
Architecture	23.85	HI	20.01	HI	12.24	HI	6.55	AV
Engineering	20.73	HI	18.16	HI	13.30	HI	10.43	LO
Eng/Eng-Related Tech	24.02	HI	15.96	HI	14.48	HI	NA	NA
Health Sciences	30.75	HI	14.21	HI	10.08	HI	5.58	HI
Health-Related Activities	NA	NA	NA	NA	NA	NA	NA	NA
Life Sciences	34.41	LO	15.51	HI	7.52	HI	9.15	LO
Physical Sciences	28.75	HI	15.16	HI	6.14	HI	9.19	LO
Precision Production	42.91	LO	31.84	LO	NA	NA	NA	NA
Science Technologies	NA	NA	31.85	LO	NA	NA	NA	NA
Visual/Performing Arts	19.15	HI	15.78	HI	8.80	HI	10.64	LO
Average, High Intensity	25.96		16.25		10.27		9.64	
NFM Recommendations	*31.60*		*24.20*		*16.25*		*6.00*	
Average Intensity Disciplines					0.00			
Agribus/Agri Production	11.26	HI	11.57	HI	20.63	LO	NA	NA
Agricultural Sciences	9.88	HI	8.13	HI	NA	NA	NA	NA
Computer/Information Sci	31.13	HI	23.87	HI	15.25	HI	12.29	LO
Home Economics	36.40	LO	22.32	HI	10.01	HI	9.38	LO
Law	NA	NA	32.59	LO	26.43	LO	1.46	HI
Liberal/General Studies	34.96	LO	25.50	AV	14.69	HI	17.30	LO
Multi/Interdis Studies	70.95	LO	55.05	LO	6.01	HI	0.00	HI
Renew Natural Resources	NA	NA	NA	NA	NA	NA	NA	NA
Average, Average Intensity	35.77		24.72		22.17		11.52	
NFM Recommendations	*32.50*		*25.60*		*17.00*		*7.00*	
Low Intensity Disciplines					0.00			
Area/Ethnic Studies	31.73	HI	22.53	HI	9.35	HI	50.81	LO
Business/Management	41.70	LO	34.27	LO	21.22	LO	7.42	LO
Communications	28.08	HI	24.81	HI	16.05	HI	16.79	LO
Communications Tech	NA	NA	NA	NA	NA	NA	NA	NA
Education	24.60	HI	27.84	LO	20.23	LO	10.19	LO
Foreign Languages	26.12	HI	13.35	HI	8.98	HI	9.64	LO
Interpersonal Skills	NA	NA	NA	NA	NA	NA	NA	NA
Leisure Recreation Act	NA	NA	NA	NA	NA	NA	NA	NA
Letters	20.85	HI	23.55	HI	10.22	HI	13.34	LO
Library/Archival Sciences	34.56	LO	12.73	HI	21.14	LO	10.17	LO
Marketing/Distribution	NA	NA	NA	NA	NA	NA	NA	NA
Mathematics	29.16	HI	30.71	LO	12.03	HI	9.91	LO
Military Science	NA	NA	NA	NA	NA	NA	NA	NA
Military Technologies	NA	NA	NA	NA	NA	NA	NA	NA
Parks/Recreation	115.40	LO	49.95	LO	11.42	HI	NA	NA
Philos/Religion/Theology	32.78	AV	19.19	HI	7.37	HI	9.12	LO
Protective Services	67.15	LO	38.76	LO	12.14	HI	12.08	LO
Psychology	73.45	LO	32.03	LO	9.72	HI	10.98	LO
Public Affairs	43.85	LO	25.32	AV	22.38	LO	9.31	LO
Social Sciences	53.33	LO	27.88	LO	10.36	HI	12.03	LO
Average, Low Intensity	32.44		29.24		17.15		10.33	
NFM Recommendations	*34.55*		*26.60*		*17.00*		*7.00*	
High Intensity	*31.60*		*24.20*		*16.25*		*6.00*	
Mid Point		*32.05*		*24.90*		*16.63*		*6.50*
Average Intensity	*32.50*		*25.60*		*17.00*		*7.00*	
Mid Point		*33.53*		*26.10*		*17.00*		*7.00*
Low Intensity	*34.55*		*26.60*		*17.00*		*7.00*	

Exhibit 7

Characteristics of University Funding Formulas States in Southern Regional Education Board, 1986-87

State	Number of Functional Categories	Number of Levels for Instruction	Number of Programs for Instruction	Percent Request Formulas is Funded
Alabama	7	3	14	80%
Arkansas	10	5	50	NA
Florida	5	4	3	NA
Georgia	7	3	5	100%
Kentucky	8	5	16	88%
Louisiana	8	6	8	67%
Maryland	8	2	24	80%
Mississippi	8	3	50	68%
North Carolina	NA	NA	NA	NA
Oklahoma	8	3	Varies	87%
South Carolina	7	3	35	88%
Tennessee	8	5	29	100%
Texas	8	5	18	NA
Virginia	8	6	30	92%
West Virginia	NA	NA	NA	NA

Exhibit 8

Trends in the Distribution of SUS Expenditures by Function

Function	FY81	FY86	FY91
Instruction & Research	60.43%	63.44%	65.93%
Institutes & Centers	1.54%	1.61%	1.28%
Plant Operations & Maintenance	13.31%	12.28%	10.40%
Administrative Services	13.28%	11.46%	9.42%
Radio & TV Stations	0.45%	0.38%	0.31%
Libraries	5.74%	5.83%	6.29%
Museums	0.36%	0.29%	0.33%
Laboratory Schools	1.00%	0.86%	0.89%
Student Services	3.89%	3.85%	5.15%
Total	100.00%	100.00%	100.00%
Formula Components	73.74%	75.72%	76.33%
Non-Formula Components	26.26%	24.28%	23.67%

4.0 CONCEPTS OF FUNDING EQUITY

A common issue in the evaluation of higher education funding processes across the nation is whether available resources are allocated equitably among the colleges and universities in the state. The equity debate often pits groups of institutions against one another, such as those universities that are well-established versus those that are still developing, those located in urban areas versus those in more rural settings, schools serving growing numbers of students versus those with stable or even declining enrollments, or those who have members of the majority versus a minority race or a specific gender as their primary clientele.

State systems seek to maintain an equitable funding process for a number of different reasons. Not only do state leaders want to minimize discord among the institutions and their leaders, they also recognize that an equitable funding process adds to the credibility of the system's management, which in turn can be important in gaining additional public support for the system. Also, the equity of educational funding processes can become the subject of litigation (although most funding equity cases to date have dealt with the process for financing elementary-secondary education rather than postsecondary education). Perhaps most importantly, the value of equity is an implicit assumption in almost all aspects of higher education -- including the state funding process.

4.1 Relationship Between Adequacy and Equity

Although equity is almost always a current issue to at least someone in a state system of higher education, concerns about equity are heightened in periods when the adequacy of funding also is subject to question. That is, institutional leaders who believe that their institution has not received a sufficient allocation to carry out its mission are likely to have suspicions about whether their share of the allocation is equitable. A heightened concern about adequacy of funding can be a major contributor to the difficulty in achieving consensus about whether any particular allocation is equitable.

Adequacy of funding for the State University System is now a major concern after several years of state revenue shortfalls and the resultant budget reductions that have been imposed on the SUS and other state agencies. Although the current study is not specifically intended to address issues of funding adequacy, the magnitude of recent reductions in funding levels may be a bigger issue than equity of the allocation. Recent reductions are at least equal to the amount of funding differences among the nine universities which gave rise to the current equity concerns.

Between the 1989-90 and 1991-92 fiscal years, the Educational and General budget (all sources of funds) grew from $1.017 billion to $1.079 -- a 6.1% increase. This apparent increase in funding, however, is deceptive as seen in exhibit 9. After the effects of a 9.1% increase in the Consumer Price Index (CPI) and an 8.7% increase in full-time-equivalent student enrollment, real spending per FTE student has declined by 10.6%.

Exhibit 9

Adequacy of Funding: Shifts in Funding Levels Per FTE Student Between FY90 and FY92

Fiscal Year	Expenditures	CPI	FTE	$/FTE	CPI-Adjusted $/FTE
1989-90	$1,017,533,295	127.0	99,455	$10,231	$10,231
1990-91	$1,039,339,119	134.0	104,219	$9,973	$9,452
1991-92	$1,079,706,400	138.6	108,143	$9,984	$9,148
Change: 90-92	$62,173,105	11.6	8,688	($247)	($1,083)
Percent	*6.1%*	*9.1%*	*8.7%*	*-2.4%*	*-10.6%*
1991-92 (Reduced 5%)	$1,025,721,080	138.6	108,143	$9,485	$8,691
Change: 90-92	$8,187,785	11.6	8,688	($746)	($1,540)
Percent	*0.8%*	*9.1%*	*8.7%*	*-7.3%*	*-15.1%*

The current funding situation is likely to grow worse. The data just described for 1991-92 are from the original appropriation. That is, funding can be expected to drop another 4-5% as the Governor and Legislature deal with the current state revenue shortfall. If funding is reduced 5%, as earlier proposed by the Governor, real funding per FTE student will fall by over 15% in a two-year period.

The brief illustration above is not intended to be a definitive treatment of funding adequacy for the State University System in 1991-92. However, it should be sufficient to illustrate that funding adequacy concerns should not be obscured by the concurrent debate about the equity of funding among the universities.

4.2 Alternative Concepts of Equity

By its very nature, viewpoints on whether equity has been achieved in the allocation of scarce resources -- like beauty -- is in the eye of the beholder. Even at the conceptual level, consensus on a definition of equity is difficult to achieve.

Some participants in the funding process seem to regard ***equal dollar amounts per institution*** as their measure of equity while some focus on ***equal dollars per student***. Still others consider ***equal funding rates per full-time-equivalent student*** to be a more valid criterion. Probably the most accepted concept is that an equitable funding process provides ***comparable dollars for comparable programs*** on a per-FTE student basis.

In the absence of an absolute agreement on what constitutes equity, one approach to judging whether a funding process has produced an equitable result is to compare the funding levels of the subject institutions. The comparison of funding levels across universities is a well-developed analytic procedure and has been used for many other purposes, such as establishing desired (competitive) funding rates and making indirect judgements about institutional quality. Direct comparisons are not only useful in measuring equity, but also the methods that have been developed to ensure an "apples to apples" comparison of funding levels are equally useful in developing a process to evaluate whether the design of a funding process is equitable.

In assessing either the adequacy or the equity of the funding level of an individual institution, a frequent first step is to identify other institutions -- often termed "peers" -- and then compare either aggregate or detailed funding levels. For equity analysis purposes, peers can be selected from among other institutions within the same state or from those in other states.

The key requirement in using peers to assess funding equity is for the institutions to share similar characteristics which are believed to be relevant for their funding requirements. These characteristics sometimes include:

- ***Program Mix.*** Some programs, e.g., engineering, are known to cost significantly more to offer than other programs and can have a considerable impact on average institutional costs. Peers should offer a similar mix of high cost programs.

- ***Instructional Level Mix.*** Generally speaking, costs per student tend to increase with instructional level, i.e., doctoral instruction costs more to offer than freshman instruction. Peers should have similar emphases on upper and graduate-level instruction.

- ***Size.*** Universities of differing size are believed to experience economy of scale to differing degrees. Therefore, peers should have the same general enrollment level.

- ***Institutional Location.*** Some regions of the country have higher costs for goods, services and support personnel than others, and urban locations within a particular region face different costs structures than their rural counterparts. Peers are frequently chosen based on geographic considerations.

When all peer institutions are selected from the state where the equity analysis is being conducted, an equitable funding process would lead to all members of each group of peer institutions having similar per-student funding rates. When peers are selected from other states, each category of institutions should have the same proportionate relationship to its peers, e.g., 95% of average, in per-student funding levels.

4.3 Typical Provisions for Equity in Funding Process

Perhaps the best way for a state to demonstrate that its funding process is equitable is to rely, at least in part, on formulas to allocate resources. Under a formula approach, for example, each student credit hour in upper division computer science might generate the same amount of funds regardless of which university teaches the course.

Not surprisingly, many funding formulas or processes incorporate variables that deal with the characteristics used to define peer groupings. In an attempt to respond equitably to the differing needs of institutions, instructional formulas generally provide different rates of funding according to discipline and level of instruction. Similarly, formulas for support functions often recognize economy of scale and geographic cost differentials.

To administer their formulas, states usually adopt a number of related policy guidelines that also affect how funding is allocated. These policies may, or may not, be specifically concerned with equity. For instance, policy decisions are needed about which enrollment data to use in the formula, whether to protect universities from funding reductions, or whether to provide for minimum salary increases for all continuing employees on all campuses. Depending on the circumstances, such policy guidelines can become more important than the formula itself in their impact on the actual allocation.

The allocation often is designed to implement or reinforce a variety of technical and policy decisions such as:

- ***Enrollment Policy.*** Comparisons of resources per student to assess the equity and adequacy of funding generally are based on the count of students actually attending. However, allocations are sometimes based on "assigned students" in accordance with state enrollment management policy.

- ***No-Loss Provisions.*** During periods of slow or no budget growth for the overall system, the strict application of the funding formula can lead to some universities experiencing reduced appropriations. A "no-loss" policy to protect universities from funding reductions is common.

- ***Salary Policy.*** Sometimes due to either legislative policy, negotiated agreements with labor organizations, or Board policy, minimum salary adjustments are specified and supersede the normal allocation procedure.

- ***Program Phase-In/Out Policies.*** When a decision has been made either to implement or discontinue a program, its interim funding requirements may not be reflected by an enrollment-based funding process. Higher education funding methodologies often incorporate a policy of line-item funding for many new or discontinued programs.

- ***Financial Aid Policy.*** When student financial aid is administered by the university using unrestricted funds, student grants are treated as expenditures. Therefore, the state's eligibility policies on financial aid can affect a university's need for (and equitable share of) funds somewhat independent of the number of students enrolled.

- ***Special Research and Service Missions.*** Universities frequently are assigned research and service missions that are largely unrelated to the numbers of students enrolled. Prime examples are the numerous institutes and centers that require considerable funding but do not generate FTE students.

- ***Quality/Program Priority Policy Mandates.*** State boards often make decisions to assign a university to develop and maintain programs of national distinction, perhaps through creating endowed chairs or centers of excellence. Where such assignments and special funding exist, per-student funding levels are enhanced.

- ***Facilities Maintenance Policies.*** For a variety of reasons, but often related to the age of the institution, universities face greatly different costs in maintaining and operating their physical plants and other assets. Universities with similar enrollment levels may need significantly different allocations for physical plant operations to maintain comparable facilities for their students.

For a number of valid, policy-related reasons, per-student funding for universities with the same general mission in the same system may be specifically intended to vary.

In addition to formulas, most states find the need to allocate some portion of available funding on a more subjective basis. "Special allocations" may be a more appropriate method than formulas to provide funds for activities that are difficult to quantify or to allocate funds when specific amounts are already known, e.g., special payments for specific contractual commitments. Also, special allocations often are made to support a major program, e.g., a state museum, that is unique in the system and equity among institutions is not a major funding concern.

4.4 Proposed Working Definition of Equity

In the current project, the primary task is to make "an assessment of the extent to which funds are allocated on an equitable basis for comparable programs across the State University System." As the basis for this assessment, we propose the following

working definition of equity:

> *A funding process will be considered to be equitable in its treatment of the individual universities if the resulting allocation:*
>
> - *recognizes, on a per-student basis, known and material differences in the costs of carrying out the assigned mission of each university*
> - *implements policy decisions that are considered to be equitable, and*
> - *provides each university with the same relative capacity to fulfill its assigned mission.*

This working definition assumes that each mission is of equal priority to the state, but it does not attempt to determine whether missions have been assigned equitably among the universities. Further, the definition avoids the adequacy issue in that it requires only that each university have "the same relative capacity" to carry out its mission.

Using this definition, our analysis will require both a technical review of the design of any mathematical funding formulas and supporting databases that are used in the allocation and an investigation of the reasonableness and impact of policy decisions. This definition also has several implications for the types of questions to be addressed during the course of the project:

1. Do the formula variables correspond to significant differences in the individual missions of the universities?
2. Are the values for the variables used in the formula based on documented differences in the costs of performing various missions?
3. Are the policy guidelines applied uniformly to all institutions?
4. Are the policy guidelines applied consistently over time, such that they do not affect the long-term equity of the funding process?
5. Do the special (non-formula) allocations relate to significant and unique needs of the individual universities?
6. Is each university provided an equal opportunity for its uniqueness to be recognized in the funding process?

4.5 Other Desired Characteristics in a State Funding Process

Although the express purpose of this report is to assess the equity of the SUS budget process, the reader is reminded that equity is only one criterion for evaluating a funding process. Other important criteria include whether the allocation process:

- contributes to the achievement of statewide goals for the universities,
- is cost-efficient to administer,
- protects the universities from extreme short-term fluctuations in funding levels,
- focuses on major policy issues in addition to equity concerns.

Our analyses and recommendations will take these factors into account in addition to equity concerns.

5.0 EQUITY OF THE NEW FUNDING METHODOLOGY AS AN ALLOCATION PROCESS

The simplest and perhaps the most common method for assessing whether the allocation of funding among the nine state universities is equitable is to analyze the dollars allocated per full-time-equivalent (FTE) student actually enrolled. In conducting such an analysis, however, any variances found among the nine universities in the aggregate per-student funding rates may or may not necessarily be inequitable. According to the definition of equity adopted for this study, an equitable funding process provides each university an equal opportunity to fulfill its *de facto* mission successfully. Therefore, if a funding difference is directly attributable to the costs of a university carrying out an academic mission that is different from others, the funding difference is considered to be equitable rather than inequitable.

Likewise, our definition of an effective funding system recognizes the desirability of funding policies that promote other goals in addition to equity, e.g., creating predictable and stable funding levels or developing new programs and services. As long as these policies do not consistently favor one set of universities over another, they also would not be considered to be inappropriate merely because they lead to short-term differences in per-student funding.

In this chapter, we analyze the equity of a simulated allocation of the 1990-91 appropriation among the nine universities based on the concepts of the New Funding Methodology and other recent funding strategies.

5.1 Background of the New Funding Methodology

Based on concerns from some of the universities, the SUS conducted a study in 1984 which "determined that inequities did result from the (then) current allocation process." Based on this finding, the SUS undertook several years of formula review which resulted in the Board of Regents adopting a "New Funding Methodology" (NFM) in 1987 and, after further study at the request of the Legislature, again in 1988. The premise of the NFM is that its formulas would lead to an equitable allocation if fully implemented. Since the SUS has not fully implemented the NFM formulas due both to policy constraints and funding limitations, the SUS budget staff has testified before PEPC in 1991 that an equitable allocation still has not been achieved. Our study attempts to go beyond the testimony of SUS staff and to determine whether the NFM could lead to an equitable allocation if it were fully implemented.

The SUS New Funding Methodology does not claim to provide each university with equal funding per FTE student. Instead, the methodology generally attempts to provide equal funding for equal levels of activity in comparable programs. Under this approach, institutions receive equal funding per FTE only when they have comparable programs with similar levels of activity.

By design, at least 18 different components of the State University System (SUS) New Funding Methodology allocation process (if fully implemented) would contribute to differential funding rates per FTE student. Many of the 18 components are highly visible steps in the SUS funding process and are intended to contribute to equitable -- though differential -- funding. Some components are designed to comply with sections of the Florida Statutes or the General Appropriations Act and the accompanying Letter of Intent. Other components result from policy decisions made by the Board of Regents upon their adoption of the New Funding Methodology in 1987 and 1988. Although these components contribute to differential funding, they are specifically intended to promote equity through their ability to recognize the differential needs of the nine universities. The 18 components are:

- enrollment planning and management policies
- formula-based allocations to recognize the requirements of fulfilling different academic missions
  - instructional program offerings
  - staffing characteristics
  - fee waivers
  - library clientele characteristics
  - library new program support
  - branch campuses
- non-formula allocations which also recognize the requirements of fulfilling different academic missions
  - non-enrollment generated appropriations and/or allocations for instruction and research
  - funding for unique operations, such as campus radio-television stations and statewide museums
- allocations to recognize the requirements of universities serving a different mix of students
  - part-time students
  - students enrolled in special units
  - disadvantaged students
  - students eligible for need-based student financial aid
  - students eligible for merit-based student financial aid
- physical plant operation and maintenance allocations
- administrative direction and support services allocations
  - economy of scale considerations
  - administrative services for special units
- funding stability, or hold harmless, policies

These 18 NFM components should help explain major funding differences among the nine universities.

5.2 Analytic Approach

Since the actual allocation is not totally based on the NFM, our analytic approach attempts to simulate an allocation based on the formula concepts of the New Funding Methodology and the actual dollars by program category which were appropriated by the Legislature in 1990-91.[3] We first calculate a gross funding measure of allocations per FTE student actually enrolled for each university and for the overall system for the 1990-91 fiscal year. We then isolate each of the 18 separate components that are known to result in differential funding levels per student among the universities. We discuss the rationale for each of the formula components and then illustrate the magnitude of funding realignments that result.

As a result of these 18 components and other unexplained factors, the gross funding levels per FTE student in the 1990-91 fiscal year varied across the universities by more than 20% over or under the system average of $10,044, with the range from the highest to the lowest funding rate being $4,445 per FTE student:

GROSS FUNDING PER FTE STUDENT										
	UF	FSU	FAMU	USF	FAU	UWF	UCF	FIU	UNF	SUS
$ Per FTE	12,060	9,902	10,256	10,200	12,003	9,538	7,615	8,460	8,543	10,044
Variance	2,016	-141	212	156	1,960	-506	-2,429	-1,584	-1,500	0

Again, these variances in unadjusted funding per FTE do not necessarily indicate that the 1990-91 allocation was inequitable. The variance was inequitable only if the differences cannot be attributed to either mission-related and policy-based factors which, according to the NFM recommendations, justify special funding recognition.

5.3 Enrollment Planning and Management Policies

The funding calculation shown above is based on ***actual*** FTE enrollment in FY91. According to Florida Statutes, however, funding decisions are to be based on ***planned*** FTE enrollment. The intent of the law is to discourage indiscriminate growth and to aid in directing the state's scarce educational resources toward programmatic areas of

[3]In practice, the SUS allocation process starts with the prior year funding base intact (the "hold harmless" policy). The New Funding Methodology has been used only to allocate the increments of new funding that are appropriated each year for growth or enhancement. In this analysis, we first apply the formula concepts of the New Funding Methodology and the residual difference in per-student funding is assumed to be the result of the hold harmless policy.

greatest priority, e.g., accommodating transfer students under the Articulation Agreement. In compliance with the statutes and administrative regulations, the Deputy Commissioner of Education conducts periodic enrollment estimating conferences where representatives of the Legislature, the Commissioner and the SUS agree on planned (or funded) enrollment levels for each university in a number of discrete categories. For a broad variety of reasons, the actual and planned enrollments for the universities differ considerably. For FY91, for instance, actual enrollments for the System exceeded planned enrollments by nearly 7%, as seen in exhibit 10. All nine universities exceeded their enrollment plans; one university (FAMU) was 20% over its plan while others surpassed their target by less than 1%.

When the ratio of planned to actual enrollment for the individual universities varies significantly from the system average, significant amounts of dollars are redistributed as shown below:

FUNDING ADJUSTMENT FOR PLANNED ENROLLMENT PER FTE STUDENT										
	UF	FSU	FAMU	USF	FAU	UWF	UCF	FIU	UNF	SUS
$ Per FTE	12,163	10,823	12,375	10,211	12,154	9,835	8,553	9,873	9,035	10,705
Adjustments	-103	-921	-2,118	-11	-151	-297	-938	-1,413	-492	-661
Variance	1,458	119	1,670	-494	1,449	-870	-2,152	-832	-1,670	0

5.4 Allocations to Recognize the Requirements of Fulfilling Different Academic Missions

The SUS New Funding Methodology has six formula-based provisions to relate funding levels to the costs of different academic missions. Four of the six factors are based, at least in part, on the concept that certain instructional programs are more expensive to carry out than other programs.

Instructional Program Mix

The component of the formula that accounts for the largest pool of dollars is the instructional productivity calculation which determines the number of instruction and research (I&R) positions. The SUS New Funding Methodology recognizes that the number of FTE students that are to be served per FTE academic position should vary by both instructional level and academic discipline. The formula enables the universities to offer classes with successively smaller enrollments as the course level advances from lower level (courses generally taken by freshmen and sophomores) through upper level (courses generally taken by juniors and seniors) and then to graduate classroom and graduate thesis and dissertation.

Exhibit 11 lists enrollment by level for each university. In comparison to each university's share of the overall FTE enrollment in the System, the greatest variance is seen at the lower level and in thesis/dissertation supervision.

Exhibit 10

Comparison of Actual and Planned FTE Enrollment By University and By Level, 1990-91

23-Dec-91

Level	UF	FSU	FAMU	USF	FAU	UWF	UCF	FIU	UNF	SUS
Actual Annual FTE Enrollment										
Lower Level	7,599	5,669	2,900	3,570	1,170	837	3,023	2,129	820	27,717
Upper Level	10,235	9,746	2,620	10,566	4,328	2,932	7,865	8,670	2,672	59,634
Sub, UndGr	*17,834*	*15,415*	*5,520*	*14,136*	*5,498*	*3,769*	*10,888*	*10,799*	*3,492*	*87,351*
Graduate Classroom	3,689	3,199	252	2,728	1,016	726	1,333	1,813	668	15,424
Thesis/Dissertation	507	406	8	179	75	18	63	47	3	1,306
Sub, Grad	*4,196*	*3,605*	*260*	*2,907*	*1,091*	*744*	*1,396*	*1,860*	*671*	*16,730*
Total	**22,030**	**19,020**	**5,780**	**17,043**	**6,589**	**4,513**	**12,284**	**12,659**	**4,163**	**104,081**
Planned Annual FTE Enrollment										
Lower Level	8,072	6,097	2,684	4,006	1,100	859	2,785	1,997	765	28,365
Upper Level	9,612	7,971	1,843	9,756	4,383	2,759	6,741	7,197	2,446	52,708
Sub, UndGr	*17,684*	*14,068*	*4,527*	*13,762*	*5,483*	*3,618*	*9,526*	*9,194*	*3,211*	*81,073*
Graduate Classroom	3,582	3,069	277	3,063	988	761	1,320	1,658	716	15,434
Thesis/Dissertation	534	347	13	191	53	15	79	44	0	1,276
Sub, Grad	*4,116*	*3,416*	*290*	*3,254*	*1,041*	*776*	*1,399*	*1,702*	*716*	*16,710*
Total	**21,800**	**17,484**	**4,817**	**17,016**	**6,524**	**4,394**	**10,925**	**10,896**	**3,927**	**97,783**
Actual FTE Enrollment Over (Under) Plan										
Lower Level	(473)	(428)	216	(436)	70	(22)	238	132	55	(648)
Upper Level	623	1,775	777	810	(55)	173	1,124	1,473	226	6,926
Sub, UndGr	*150*	*1,347*	*993*	*374*	*15*	*151*	*1,362*	*1,605*	*281*	*6,278*
Graduate Classroom	107	130	(25)	(335)	28	(35)	13	155	(48)	(10)
Thesis/Dissertation	(27)	59	(5)	(12)	22	3	(16)	3	3	30
Sub, Grad	*80*	*189*	*(30)*	*(347)*	*50*	*(32)*	*(3)*	*158*	*(45)*	*20*
Total	**230**	**1,536**	**963**	**27**	**65**	**119**	**1,359**	**1,763**	**236**	**6,298**
Variance from Planned FTE										
Lower Level	-5.9%	-7.0%	8.0%	-10.9%	6.4%	-2.6%	8.5%	6.6%	7.2%	-2.3%
Upper Level	6.5%	22.3%	42.2%	8.3%	-1.3%	6.3%	16.7%	20.5%	9.2%	13.1%
Sub, UndGr	*0.8%*	*9.6%*	*21.9%*	*2.7%*	*0.3%*	*4.2%*	*14.3%*	*17.5%*	*8.8%*	*7.7%*
Graduate Classroom	3.0%	4.2%	-9.0%	-10.9%	2.8%	-4.6%	1.0%	9.3%	-6.7%	-0.1%
Thesis/Dissertation	-5.1%	17.0%	-38.5%	-6.3%	41.5%	20.0%	-20.3%	6.8%	NA	2.4%
Sub, Grad	*1.9%*	*5.5%*	*-10.3%*	*-10.7%*	*4.8%*	*-4.1%*	*-0.2%*	*9.3%*	*-6.3%*	*0.1%*
Total	**1.1%**	**8.8%**	**20.0%**	**0.2%**	**1.0%**	**2.7%**	**12.4%**	**16.2%**	**6.0%**	**6.4%**

Exhibit 11

23-Dec-91

Analysis of FTE Enrollment Mix By University and By Level
Actual Annual FTE, 1990-91

Level	UF	FSU	FAMU	USF	FAU	UWF	UCF	FIU	UNF	SUS
FTE Enrollment by Level										
Lower Level	7,599	5,669	2,900	3,570	1,170	837	3,023	2,129	820	27,717
Upper Level	10,235	9,746	2,620	10,566	4,328	2,932	7,865	8,670	2,672	59,634
Sub, UndGr	*17,834*	*15,415*	*5,520*	*14,136*	*5,498*	*3,769*	*10,888*	*10,799*	*3,492*	*87,351*
Graduate Classroom	3,689	3,199	252	2,728	1,016	726	1,333	1,813	668	15,424
Thesis/Dissertation	507	406	8	179	75	18	63	47	3	1,306
Sub, Grad	*4,196*	*3,605*	*260*	*2,907*	*1,091*	*744*	*1,396*	*1,860*	*671*	*16,730*
Total	22,030	19,020	5,780	17,043	6,589	4,513	12,284	12,659	4,163	104,081
Percent Distribution by Level for Each University										
Lower Level	34.5%	29.8%	50.2%	20.9%	17.8%	18.5%	24.6%	16.8%	19.7%	26.6%
Upper Level	46.5%	51.2%	45.3%	62.0%	65.7%	65.0%	64.0%	68.5%	64.2%	57.3%
Sub, UndGr	*81.0%*	*81.0%*	*95.5%*	*82.9%*	*83.4%*	*83.5%*	*88.6%*	*85.3%*	*83.9%*	*83.9%*
Graduate Classroom	16.7%	16.8%	4.4%	16.0%	15.4%	16.1%	10.9%	14.3%	16.0%	14.8%
Thesis/Dissertation	2.3%	2.1%	0.1%	1.1%	1.1%	0.4%	0.5%	0.4%	0.1%	1.3%
Sub, Grad	*19.0%*	*19.0%*	*4.5%*	*17.1%*	*16.6%*	*16.5%*	*11.4%*	*14.7%*	*16.1%*	*16.1%*
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Percent Distribution by University for Each Level										
Lower Level	27.4%	20.5%	10.5%	12.9%	4.2%	3.0%	10.9%	7.7%	3.0%	100.0%
Upper Level	17.2%	16.3%	4.4%	17.7%	7.3%	4.9%	13.2%	14.5%	4.5%	100.0%
Sub, UndGr	*20.4%*	*17.6%*	*6.3%*	*16.2%*	*6.3%*	*4.3%*	*12.5%*	*12.4%*	*4.0%*	*100.0%*
Graduate Classroom	23.9%	20.7%	1.6%	17.7%	6.6%	4.7%	8.6%	11.8%	4.3%	100.0%
Thesis/Dissertation	38.8%	31.1%	0.6%	13.7%	5.7%	1.4%	4.8%	3.6%	0.2%	100.0%
Sub, Grad	*25.1%*	*21.5%*	*1.6%*	*17.4%*	*6.5%*	*4.4%*	*8.3%*	*11.1%*	*4.0%*	*100.0%*
Total	21.2%	18.3%	5.6%	16.4%	6.3%	4.3%	11.8%	12.2%	4.0%	100.0%

The instructional productivity formula also recognizes three broad groups of disciplines according to their need for close faculty supervision:

- high intensity disciplines -- primarily courses in the sciences and fine arts -- which require the smallest average class size;
- average intensity disciplines -- agriculture, home economics, computer science and law;
- low intensity disciplines -- primarily courses in the social sciences, business and teacher education -- where large enrollment classes can be accommodated more successfully.

The combination of four levels and three discipline groupings yields the following 12 different student-faculty ratios, as shown in exhibit 12:

Exhibit 12

Student-Faculty Ratios by Discipline and Level

Instructional Level	Intensity: High	Average	Low
Lower Level	31.60	32.50	34.55
Upper Level	24.20	25.60	26.60
Graduate Classroom	16.25	17.35	17.35
Thesis/Dissertation	6.00	7.00	7.00

If all resulting instruction and research positions and their related support positions were funded at the system average salary rates, the instruction and research productivity factors would lead to the following differences in funding per FTE student:

I & R POSITION FUNDING PER FTE STUDENT										
	UF	FSU	FAMU	USF	FAU	UWF	UCF	FIU	UNF	SUS
$ Per FTE	5,746	5,638	4,866	5,652	5,598	5,466	5,443	5,524	5,481	5,575
Variance	171	63	-709	76	22	-109	-132	-51	-94	0

Staffing Characteristics

Once the number of academic positions is determined by the student-faculty ratios and other productivity factors, differential salary rates by university are used to calculate total academic salary requirements. The SUS New Funding Methodology specifies that faculty salary averages should vary by university based on the discipline mix and graduate teaching and research work loads. National studies show that average faculty salary rates vary dramatically (by more than 100%) from one discipline to another, with engineering and law faculty, for instance, being paid more than twice the salary rate as faculty in the arts. Other national studies show that faculty salary averages also vary by institutional type, with salaries at graduate research universities greatly exceeding those at predominantly undergraduate institutions.

Exhibit 13 compares faculty salaries at the SUS institutions to the corresponding categories of universities in the AAUP and SREB salary surveys. In both surveys, the three major doctoral-granting universities (UF,FSU and USF) appear to be the least competitive with their assigned peers while the other six universities typically match or exceed the salaries paid at similar universities in other states.

In recognition of the competitive environment for recruiting and retaining faculty, the New Funding Methodology provides unique faculty salary averages for each the nine universities. The New Funding Methodology also provides different salary rates for I&R support personnel, due both to the different proportions of scientific/technical staff that are required for the different programs and the recognition of a geographic area salary cost differential for certain types of positions. When both faculty and support staff salary rate differentials are applied to FY91 staffing levels and then reduced to dollars per FTE student, the New Funding Methodology salary policy results in the following variances:

SALARY ADJUSTMENTS PER FTE STUDENT										
	UF	FSU	FAMU	USF	FAU	UWF	UCF	FIU	UNF	SUS
Av Fac Sal	55,941	54,596	48,254	51,421	52,846	48,647	49,952	48,346	47,418	52,196
Av Spt Sal	19,077	20,443	18,265	19,034	19,346	18,851	17,947	19,944	19,958	19,346
Variance	279	209	-280	67	51	-271	-199	-267	-333	0

Fee Waivers

Some of the additional costs of graduate education are recognized in the provisions for allocating fee waivers. Fee waivers permit certain students to avoid paying tuition and fees. To comply with industry financial reporting standards, a fee waiver is recorded both as a revenue (student tuition and fees) and as an expense (scholarships and fellowships). In accordance with the recommendations of a joint PEPC-SUS study in 1989, the SUS allocation procedures direct about three-fourths of the fee waivers to those institutions with the largest number of graduate assistants.

Exhibit 13

Relative Equity of Faculty Salary Averages in Comparison to Peers by Peer Grouping and Comparative Measure

23-Dec-91 datshl08

Comparative Measure	UF	FSU	FAMU	USF	FAU	UWF	UCF	FIU	UNF	SUS
Data Source: 1990-91 AAUP Survey (Weighted Average; Three Ranks)										
Peers: AAUP Category Averages										
SUS Averages	47,800	45,600	41,200	44,900	45,900	42,100	43,200	43,500	39,900	43,800
Peer Averages	49,238	49,238	37,817	49,238	43,849	43,849	43,849	43,849	37,817	44,305
SUS / Peer	*97%*	*93%*	*109%*	*91%*	*105%*	*96%*	*99%*	*99%*	*106%*	*99%*
Data Source: 1990-91 SREB Data Exchange										
Peers: SREB Category Averages										
SUS Averages	45,834	45,062	40,348	43,314	45,457	41,129	41,540	41,430	38,786	43,856
Peer Averages	47,405	47,405	38,183	47,405	38,183	38,152	38,183	38,183	36,506	42,101
SUS / Peer	*97%*	*95%*	*106%*	*91%*	*119%*	*108%*	*109%*	*109%*	*106%*	*104%*

FEE WAIVER FUNDING PER FTE STUDENT										
	UF	FSU	FAMU	USF	FAU	UWF	UCF	FIU	UNF	SUS
$ Per FTE	315	285	84	146	154	74	118	85	63	190
Variance	126	96	-105	-44	-36	-115	-71	-105	-127	0

Library Clientele Characteristics and New Program Requirements

Library accreditation standards, such as staffing and collection targets, are based on utilization studies which demonstrate that the rate of use of libraries varies according to the level of student, i.e., graduate students have greater requirements than undergraduates. Also, the standards indicate that the total number of campus employees and the size of the collection affect required staffing levels. The library component of the New Funding Methodology, which is a modification of a formula developed by the Washington State Council on Higher Education, incorporates some of these concepts into a separate library staffing formula.

The NFM has a separate formula element for library resources. Generally, this formula provides a replacement factor based on the size of the current collection. Current library collections per FTE student vary across the universities due to program differences, the age of the institution and local priorities. Exhibit 14 shows the size of the library collection per FTE student, with UWF at 30% above the System average and UCF trailing by 42%. The NFM also provides the opportunity for the library needs of new programs to be recognized.

Exhibit 14

Comparison of Library Inventory per FTE Student

University	Volumes-June 90	Planned FTE	Volumes per FTE	% of SUS Average
UF	3,304,845	21,800	152	128%
FSU	2,405,599	17,484	138	116%
FAMU	601,900	4,817	125	105%
USF	1,663,603	17,016	98	82%
FAU	754,651	6,524	116	97%
UWF	677,329	4,394	154	130%
UCF	746,855	10,925	68	58%
FIU	951,188	10,896	87	74%
UNF	505,178	3,927	129	108%
SUS	11,611,149	97,783	119	100%

The variances in funding per FTE student in FY91 for ongoing library operations and new program collection development were as follows:

LIBRARY FUNDING PER FTE STUDENT										
	UF	FSU	FAMU	USF	FAU	UWF	UCF	FIU	UNF	SUS
Regular $ Per FTE	674	659	766	571	750	907	489	571	801	646
Variance	28	12	120	-75	104	261	-157	-75	154	0
New Prog $ Per FTE	0	0	0	39	102	0	61	61	0	27
Variance	-27	-27	-27	12	75	-27	34	34	-27	0

Branch Campuses

Several of the universities operate extensive programs away from their primary campus location. Over the years, studies by PEPC and others have found that these universities face extra administrative and support costs in delivering programs at branch campuses and other off-site locations. The extra costs are attributed both to the distance of the branch from the base of operation and the small scale of operation, i.e., the lack of economy of scale at the branch campuses. The SUS New Funding Methodology attempts to recognize at least some of these extra costs in its allocation for student services, libraries, plant operations and maintenance, and administrative support. These amounts in FY91, on a per-student basis, were:

BRANCH CAMPUS FUNDING PER FTE STUDENT										
	UF	FSU	FAMU	USF	FAU	UWF	UCF	FIU	UNF	SUS
$ Per FTE	0	7	0	26	34	26	20	36	0	15
Variance	-15	-9	-15	10	18	11	5	21	-15	0

5.5 Non-Formula Allocations to Recognize the Requirements of Fulfilling Different Missions

In addition to the formula-based methods to recognize mission differences, the NFM also contains several non-formula provisions that provide funding for unique needs. The NFM includes substantial numbers of non-enrollment related positions for I&R programs as well as separate provisions for such units as radio and TV stations which are not found at each university.

Non-Enrollment Related Appropriations and Allocations for Instruction and Research

Over the years, a substantial number of the instruction and research positions in the State University System have been appropriated and/or allocated on bases other than growth in enrollment. Some of these positions were to provide staff for special research activities, such as the recently announced joint magnetic laboratory to be operated by UF and FSU or the long-established Engineering and Industrial Experiment Station (EIES) at UF[4]. Others were provided as part of the several special appropriations for quality improvement programs (QIP) in the mid 1980s. For the past half-dozen years, funding for the Comprehensive University Plan (CUP) has provided extra program development positions for FAU and FIU. Exhibit 15 lists the number of academic and I&R support positions by category that are allocated to each university but are not generated by the enrollment formula.

Overall, such special appropriations or allocations now amount to an estimated $1,425 per FTE student for the system average. Not surprisingly, non-enrollment based allocations contribute to a variance of over $1,000 per FTE student between the university with the most special funding (UF) and the least (UNF).

NON-ENROLLMENT I & R FUNDING PER FTE STUDENT										
	UF	FSU	FAMU	USF	FAU[5]	UWF	UCF	FIU[5]	UNF	SUS
$ Per FTE	1,831	1,441	1,465	1,460	1,452	994	1,161	1,206	677	1,425
Variance	406	16	40	35	26	-431	-264	-219	-748	0

Funding for Unique Operations

Some of the universities carry out substantial activities that are not directly related to collegiate instruction and only partially related to faculty research. Three examples include museums, radio and television stations, and laboratory demonstration schools. These special purpose facilities are not found at all of the universities and tend to be concentrated in the older institutions. The University of Florida, with all three types of special purpose operations as listed above, receives $342 more per college FTE student than the several newer institutions that do not have any of these responsibilities.

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[4]Unlike other non-enrollment positions in this discussion, the positions for EIES are funded through contracts and grants with outside parties. That is, no state dollars are appropriated to EIES and the positions can be used only if external dollars are raised.

[5]The amounts for FAU and FIU may be understated due to the estimating procedure which does not take into account the significant one-time OCO expenditures for CUP in 1990-91.

Exhibit 15

Non-Enrollment Generated Positions Allocated for Instruction and Research

University	Institutes & Centers		Quality Improvement		Technical Adjustments		Program Development		Total	
	Academic	Support	Academic	Support	Academic	Support	Academic	Support	Academic	Support
UF	185.91	263.25	114.84	120.42	3.49	17.30	-0.50	-0.50	303.74	400.47
FSU	56.35	90.00	122.71	137.10	28.61	71.31	10.00	5.00	217.67	303.41
FAMU	5.50	6.00	70.25	27.50	12.49	-1.30	4.50	3.00	92.74	35.20
USF	80.00	294.00	103.63	67.87	-9.90	-33.27	4.00	-1.50	177.73	327.10
FAU	10.50	13.00	41.54	19.14	-2.39	-14.49	69.70	31.55	119.35	49.20
UWF	13.92	5.00	33.35	18.00	8.55	7.07	0.00	0.00	55.82	30.07
UCF	49.56	16.00	59.72	39.00	-1.09	13.62	4.36	1.00	112.55	69.62
FIU	24.50	10.00	60.49	33.40	1.06	9.59	72.75	27.00	158.80	79.99
UNF	0.00	1.00	32.50	10.90	1.59	-7.89	0.00	0.00	34.09	4.01
SUS	426.24	698.25	639.03	473.33	42.41	61.94	164.81	65.55	1272.49	1299.07
Percent Distribution										
UF	44%	38%	18%	25%	8%	28%	0%	-1%	24%	31%
FSU	13%	13%	19%	29%	67%	115%	6%	8%	17%	23%
FAMU	1%	1%	11%	6%	29%	-2%	3%	5%	7%	3%
USF	19%	42%	16%	14%	-23%	-54%	2%	-2%	14%	25%
FAU	2%	2%	7%	4%	-6%	-23%	42%	48%	9%	4%
UWF	3%	1%	5%	4%	20%	11%	0%	0%	4%	2%
UCF	12%	2%	9%	8%	-3%	22%	3%	2%	9%	5%
FIU	6%	1%	9%	7%	2%	15%	44%	41%	12%	6%
UNF	0%	0%	5%	2%	4%	-13%	0%	0%	3%	0%
SUS	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

UNIQUE OPERATIONS FUNDING PER FTE STUDENT										
	UF	FSU	FAMU	USF	FAU	UWF	UCF	FIU	UNF	SUS
$ Per FTE	342	218	403	69	226	56	0	0	0	165
Variance	177	53	239	-96	61	-109	-165	-165	-165	0

5.6 Allocations to Recognize the Requirements of Serving a Different Mix of Students

The SUS allocation includes five provisions that attempt to recognize the differential funding needs of the universities depending on certain characteristics of the students they serve. The student's enrollment status and economic status are each recognized in two different steps. The fifth formula component provides for merit-based student financial aid. All five adjustments are made to the allocation for student services programs. Even though five separate calculations and amounts are involved, the components taken together comprise only 6% of total E&G funding in the SUS.

Part-Time Students

Although the funding requirements for providing classroom instruction are generally measured on a ***full-time-equivalent*** student basis, universities with large numbers of part-time students contend that student support services are provided on an individual person (or ***head count***) basis without regard to the number of credits for which the student is enrolled. For instance, processing the registration for a part-time student who takes one course is nearly as time-consuming as registering a full-time student for five courses. Exhibit 16 shows the variation in the enrollment of full-time and part-time students across the SUS. The three oldest universities (UF, FSU and FAMU) all enroll a significantly higher proportion of full-time and FTE students than head count students.

The SUS New Funding Methodology considers both types of enrollment-counting methods and calculates funding for general student services programs using the average of FTE and head count enrollments. This leads to slight differences in per-FTE student funding, which favor the universities with the highest proportion of part-time students:

GENERAL STUDENT SERVICES FUNDING PER FTE STUDENT										
	UF	FSU	FAMU	USF	FAU	UWF	UCF	FIU	UNF	SUS
$ Per FTE	401	419	407	444	445	439	452	449	463	430
Variance	-29	-12	-23	14	15	9	22	19	33	0

Exhibit 16

Distribution of Full-Time, Part-Time and Full-Time-Equivalent Enrollments

University	Headcount						Full-Time Equivalent	
	Full-Time		Part-Time		Total			
	#	%	#	%	#	%	#	%
UF	25,624	25.5%	5,857	9.3%	31,481	19.3%	21,986	21.1%
FSU	22,282	22.2	5,300	8.4	27,582	16.9	19,110	18.3
FAMU	6,156	6.1	1,026	1.6	7,182	4.4	5,812	5.6
USF	15,533	15.5	14,722	23.4	30,255	18.5	17,034	16.3
FAU	4,456	4.4	7,173	11.4	11,629	7.1	6,606	6.3
UWF	3,936	3.9	3,695	5.9	7,631	4.7	4,531	4.3
UCF	10,702	10.7	9,382	14.9	20,084	12.3	12,271	11.8
FIU	8,595	8.6	11,172	17.8	19,767	12.1	12,716	12.2
UNF	3,037	3.0	4,507	7.2	7,544	4.6	4,153	4.0
SUS	100,321	100.0	62,834	100.0	163,155	100.0	104,219	100.0

Special Unit Students

During the 1990-91 fiscal year, most activities of the special units, e.g., the medical centers and the Institute for Food and Agricultural Sciences (IFAS), were funded through separate budget entities. Student services programs for special unit students, however, were provided by personnel funded in the E&G budget. In recognition of this special workload, the allocation process directs additional dollars to UF and USF where the special units are located.

SPECIAL UNIT STUDENT FUNDING PER FTE STUDENT										
	UF	FSU	FAMU	USF	FAU	UWF	UCF	FIU	UNF	SUS
$ Per FTE	55	0	0	15	0	0	0	0	0	15
Variance	40	-15	-15	0	-15	-15	-15	-15	-15	0

Disadvantaged Students

The universities serve markedly different student bodies in terms of their students' academic abilities and family income levels. Low income students are believed to lack the readiness to succeed in college and, therefore, to require much more counseling and student support services than the average student. Exhibit 17 shows the proportion of "high risk" or disadvantaged students served by each university.

An add-on feature of the student services funding process, which is applicable only to FAMU, provides 10% extra funding per student due to the high proportion of economically disadvantaged students that the university enrolls. This special provision, which was adopted by the Board of Regents as part of the New Funding Methodology, amounted to $49 per student for FAMU in 1990-91.

DISADVANTAGED STUDENT FUNDING PER FTE STUDENT										
	UF	FSU	FAMU	USF	FAU	UWF	UCF	FIU	UNF	SUS
$ Per FTE	0	0	49	0	0	0	0	0	0	2
Variance	-2	-2	47	-2	-2	-2	-2	-2	-2	0

Need-Based Student Financial Aid

Of the total funds that were appropriated for student financial aid, 66% were designated by the Legislature for *need-based* financial aid. The New Funding Methodology directs that these funds be allocated in proportion to the average level of debt per student on federal student loans. Unless the universities enroll needy students in the exact same proportion as their overall FTE enrollment, the funding for financial aid will vary among the universities on a per-student basis. Overall, the SUS allocated $67 per FTE for need-based student financial aid in 1990-91, with FAMU receiving $23 more than, and FAU $37 less than, the system average.

NEED-BASED FINANCIAL AID FUNDING PER FTE STUDENT										
	UF	FSU	FAMU	USF	FAU	UWF	UCF	FIU	UNF	SUS
$ Per FTE	88	70	90	74	30	39	76	37	42	67
Variance	21	3	23	6	-37	-29	9	-31	-26	0

Exhibit 17

Enrollment of Potentially High Risk Students by Risk Category and by University

Risk Category	UF	FSU	FAMU	USF	FAU	UWF	UCF	FIU	UNF	SUS
Average SAT Score	1096	1070	840	1011	1056	946	1029	1008	1032	1036
SAT Scores in Lower Quartile of System	13.0%	16.2%	71.3%	30.6%	14.2%	47.9%	26.3%	28.6%	24.3%	25.0%
Average ACT Score	24.3	24.1	18.0	21.2	21.9	23.2	22.0	22.0	21.8	22.6
ACT Scores in Lower Quartile of System	12.9%	13.1%	63.7%	34.4%	7.8%	29.7%	17.9%	26.6%	24.9%	25.0%
High School GPA	3.35	3.39	2.77	2.92	3.33	3.13	3.29	3.19	3.13	3.19
HS GPA in Lower Quartile of System	15.0%	12.4%	52.8%	42.0%	12.6%	29.4%	19.7%	22.3%	26.4%	25.0%
Percent of Students with Pell Grants	25.4%	20.1%	62.5%	25.5%	17.8%	27.5%	28.0%	18.5%	20.4%	25.3%

Merit-Based Financial Aid Allocations

The remaining 34% of available financial aid funds were allocated on the basis of each university's collection of undergraduate financial aid fees (a small portion of the tuition charged for each credit hour is designated for student financial aid). Universities use this pool of financial aid funds to attract undergraduate students with special talents, e.g., in music, academics or athletics. Since each university's proportion of the System's FTE students differs from its proportion of undergraduate students, the allocation of merit-based student financial aid varies slightly on a per-FTE basis.

MERIT-BASED FINANCIAL AID FUNDING PER FTE FUNDING										
	UF	FSU	FAMU	USF	FAU	UWF	UCF	FIU	UNF	SUS
$ Per FTE	33	35	58	34	32	32	32	35	28	35
Variance	-2	-1	23	0	-2	-3	-3	0	-7	0

5.7 Physical Plant Operation and Maintenance Allocations

The allocation method for funding for the operation and maintenance of the physical plant takes into account a variety of variables that are not necessarily related to the number of FTE students currently enrolled. Perhaps the most powerful variable in the equation is the size of the campus (as measured in square feet and acreage) to be maintained. Variations in local utilities costs and the age and construction type of buildings are also taken into account in the allocation process.

Exhibit 18 lists the gross square feet (GSF) per FTE student for each university. Overall, the System averages about 200 GSF per FTE. The three youngest universities (UCF, FIU and UNF) tend to have the smallest plants in terms of GSF per FTE.

As seen below, physical plant funding varies almost $800 per FTE student between FAMU and UCF.

PHYSICAL PLANT FUNDING PER FTE STUDENT										
	UF	FSU	FAMU	USF	FAU	UWF	UCF	FIU	UNF	SUS
$ Per FTE	1,291	1,114	1,571	1,124	1,213	1,246	785	891	851	1,118
Variance	173	-5	453	6	95	128	-333	-227	-267	0

Exhibit 18

Gross Square Feet to be Maintained
per Full-Time Equivalent Student

Measure	UF	FSU	FAMU	USF	FAU	UWF	UCF	FIU	UNF	SUS
Gross Square Feet (GSF)	5,052,563	3,628,375	1,225,646	3,638,379	1,445,027	913,294	1,561,346	1,695,567	678,427	19,838,624
Percent of SUS	25.5%	18.3%	6.2%	18.3%	7.3%	4.6%	7.9%	8.5%	3.4%	100.0%
Planned FTE Students	21,800	17,484	4,817	17,016	6,524	4,394	10,925	10,896	3,927	97,783
Percent of SUS	22.3%	17.9%	4.9%	17.4%	6.7%	4.5%	11.2%	11.1%	4.0%	100.0%
GSF per FTE	232	208	254	214	221	208	143	156	173	203
Percent of SUS	114.2%	102.3%	125.4%	105.4%	109.2%	102.4%	70.4%	76.7%	85.2%	100.0%

5.8 Administrative Direction and Support Services

The basic treatment under the New Funding Methodology for the universities' general administrative units recognizes the concept of economy of scale. That is, the smaller universities receive relatively higher funding for administration per FTE student than their larger sister institutions. The process provides a funding base of $2 million dollars per university (which requires about 17% of total administrative funding in the System) with the remainder of funds allocated in proportion to instruction and research budgets. Over 81% of administrative funding is distributed as an equal percent (14.15%) of the I&R base budget for E&G units. Additionally, 2% of the I&R base for special unit budget entities is provided for UF and USF.

ADMINISTRATIVE SUPPORT FUNDING PER FTE STUDENT										
	UF	FSU	FAMU	USF	FAU	UWF	UCF	FIU	UNF	SUS
Regular $ Per FTE	987	954	1,091	921	1,117	1,127	877	917	1,130	975
Variance	12	-22	116	-55	142	152	-98	-58	155	0
Spec Unit $ Per FTE	55	0	0	32	0	0	0	0	0	18
Variance	37	-18	-18	14	-18	-18	-18	-18	-18	0

5.9 Funding Stability Policy

During the process leading to the adoption of the New Funding Methodology by the Board of Regents, it became apparent that full and immediate implementation of the formula recommendations would lead to major shifts in funding among the universities. To avoid severe disruption in institutional operations, the recommendations were adopted on a "hold harmless" basis. That is, no university would lose funding in the switch to a new funding process. This decision to provide stable funding has more impact on current allocations than any other single feature of the funding process. The funding base for each university (as protected by the hold harmless policy) is increased each year for "cost to continue" adjustments such as appropriated faculty salary increases. In effect, the new formulas are being used only to allocate appropriations related to growth or enhancement.

Our analytic methodology is not able to distinguish whether the residual amounts in each university's budget, after application of the New Funding Methodology formula concepts, should be attributed solely to the hold harmless policy or some other factor. Possible examples of other reasons for any unexplained variance, beyond the effects of the hold harmless policy, include the ability to shift resources among components or prior-year special allocations in the support programs. Regardless of the source, the unexplained amounts are considerable for some universities.

HOLD HARMLESS AND OTHER UNEXPLAINED RESIDUAL FUNDING PER FTE STUDENT										
	UF	FSU	FAMU	USF	FAU	UWF	UCF	FIU	UNF	SUS
$ Per FTE	64	-225	1,803	-330	951	-301	-763	327	-167	0

5.10 Summary of Impacts

Exhibit 19 summarizes the gross funding level and the impact of the 18 adjustment factors on a per FTE student basis for each of the nine universities. Apart from the hold harmless provisions, the other 17 adjustments account for over 97% of the variation in gross funding per FTE student at six of the nine universities. The university with the greatest variance from the system average before the adjustments (UCF) moves from 76% to 93% of the system average after the impact of the 17 factors is considered. The difference between the universities with the highest and lowest per-student funding rates drops from $4,445 to $2,803 per FTE after the adjustments are reflected.

Exhibit 19

Differential Treatment of Universities Based on Policies in the Simulated Allocation of 1990-91 E&G Appropriation

Allocation Equity Issue	UF	FSU	FAMU	USF	FAU	UWF	UCF	FIU	UNF	SUS
Unadjusted Allocation per Actual FTE Student	$12,060	$9,902	$10,256	$10,200	$12,003	$9,538	$7,615	$8,460	$8,543	$10,044
Variance from SUS Average	*2,016*	*(141)*	*212*	*156*	*1,960*	*(506)*	*(2,429)*	*(1,584)*	*(1,500)*	*0*
Unadjusted Allocation per Planned FTE	12,163	10,823	12,375	10,211	12,154	9,835	8,553	9,873	9,035	10,705
Planned Enrollment Adjustment	103	921	2,118	11	151	297	938	1,413	492	661
Variance from SUS Average	*1,458*	*119*	*1,670*	*(494)*	*1,449*	*(870)*	*(2,152)*	*(832)*	*(1,670)*	*0*
Formula Adjustments:										
Instructional Program Offerings	(171)	(63)	709	(76)	(22)	109	132	51	94	0
Staffing Characteristics	(279)	(209)	280	67	(51)	271	199	267	333	0
Fee Waivers	(126)	(96)	105	44	36	115	71	105	127	0
Library Characteristics	(28)	(12)	(120)	75	(104)	(261)	157	75	(154)	0
Library New Program Support	27	27	27	(12)	(75)	27	(34)	(34)	27	0
Branch Campuses	15	9	15	(10)	(18)	(11)	(5)	(21)	15	0
Non-Enrollment Appropriations/Allocations	(406)	(16)	(40)	(35)	(26)	431	264	219	748	0
Unique Operations	(177)	(53)	(239)	96	(61)	109	165	165	165	0
Part-Time Students	29	12	23	(14)	(15)	(9)	(22)	(19)	(33)	0
Special Unit Student Services	(40)	15	15	(0)	15	15	15	15	15	0
Disadvantaged Students	2	2	(47)	2	2	2	2	2	2	0
Need-Based Student Financial Aid	(21)	(3)	(23)	(6)	37	29	(9)	31	26	0
Merit-Based Student Financial Aid	2	(1)	(23)	0	2	3	3	(0)	7	0
Physical Plant Operations and Maintenance	(173)	5	(453)	(6)	(95)	(128)	333	227	267	0
Administrative Support	(12)	22	(116)	55	(142)	(152)	98	58	(155)	0
Administrative Support - Special Units	(37)	18	18	(14)	18	18	18	18	18	0
Adjusted Allocation per Planned FTE Student Based on Formula Calculations	10,769	10,480	12,508	10,375	11,656	10,404	9,941	11,031	10,537	10,705
Variance in Funding per FTE Student Attributed to Hold Harmless Policy	$64	($225)	$1,803	($330)	$951	($301)	($763)	$327	($167)	$0

6.0 COMPARISON OF FUNDING FOR SIMILAR PROGRAMS FUNDED THROUGH THE E&G AND SPECIAL UNIT BUDGET ENTITIES

A special issue in assessing the equity of funding of programs across universities occurs when similar programs are funded in both the Educational and General (E&G) budget entity and in a "special unit" budget entity. The purpose of this chapter is to analyze the budgeting processes and funding levels for two selected programs which are funded from the E&G allocation to Florida A&M University and through separate appropriations to a University of Florida special unit. The selected programs -- agriculture and pharmacy -- are offered only by these two universities. Certain other health-related programs, e.g., nursing, are funded through two special units at UF and US and through the E&G budget at most other universities.

6.1 Rationale for Special Unit Budget Entities

For many years, the Legislature has appropriated funding for selected units in the State University System outside the E&G budget. These units have received separate treatment because of their magnitude, the special character and uniqueness of their programs in comparison to programs at other SUS institutions in the same disciplines, or their importance to the Legislature. During the 1990-91 fiscal year, the following units were funded as "special units:"

- the Institute for Food and Agricultural Sciences (IFAS) at the University of Florida
- the J. Hillis Miller Health Center (JHMHC) at the University of Florida
- the University of South Florida Medical Center

These units all command significant appropriations. In 1990-91, for instance, the combined initial appropriation for these units totalled nearly $300 million, or about 27% of the E&G appropriation of $1.08 billion.

Beginning with the 1991-92 appropriation, the special units have become separate program components in the E&G budget rather than special unit budget entities. Although this change in designation provides somewhat greater authority to the Board of Regents and university administrators over the financial affairs of the special units, the Legislature still sets overall funding levels for these activities.

6.2 Profiles of Organization Arrangements and Funding Processes

Program-level funding comparisons are especially prone to criticism since the corresponding offerings across universities in the same fields frequently differ in significant ways from one another. Although both universities in this analysis offer instruction in agriculture, for instance, the two programs vary greatly in size, graduate orientation, comprehensiveness of offerings, and research and service missions. Unlike institution-wide comparisons, program-level comparisons are not able to benefit from the "law of large numbers" where many program differences are believed to offset one another in aggregate financial comparisons.

Prior to analyzing funding rates, we first will describe the agriculture and pharmacy programs at each of the two universities. This information will serve as one basis for determining whether the differences in funding rates are justified.

Pharmacy

The two pharmacy programs differ in a variety of programmatic characteristics, including the number of students served by level, as shown below in exhibit 20. Although the two programs have similar enrollment levels for majors, the UF pharmacy program has a much higher proportion of its workload at the graduate level, which typically costs more to offer, and has about twice as many FTE students.

Due in part to organizational differences, the funding processes for the two pharmacy programs also differ. The FAMU School of Pharmacy is one of 11 schools and colleges in the university. The UF College of Pharmacy, on the other hand, is one of five colleges in the J. Hillis Miller Health Center. Due to its significant size and unique character, the state has funded JHMHC as a separate special unit budget entity for a number of years.

Exhibit 21 compares several major steps in the budgeting process which determine the overall funding rates for the two pharmacy programs. Comparisons are shown as to how the amount of the budget request is determined, which program activities the appropriation encompasses, and how subsequent allocations are made. The comparisons suggest that any difference in funding levels that might exist cannot be attributed to any single decision-making body.

Exhibit 20

Comparison of Enrollment Levels
SUS Pharmacy Programs, 1989-90

Characteristics	FAMU	UF
Undergradate Students		
Pharmacy Majors	380	357
FTE Products	136	236
Graduate/Professional Students		
Pharmacy Majors	25	81
FTE Products	22	75
Total Enrollment		
Pharmacy Majors	405	438
FTE Products	158	310

The FAMU School of Pharmacy's funding needs are incorporated in the overall formula-generated appropriation request for the E&G budget entity along with those for most other SUS programs, e.g., teacher education, business, arts and sciences, etc. The School represents less than one-third of 1% of the systemwide E&G appropriation. Once the E&G appropriation is determined by the Legislature, the School's share is established after the Chancellor and the Regents allocate the appropriation among the nine universities and the FAMU President distributes the university's allocation among eleven schools and colleges. In other words, the funding rate for pharmacy at FAMU reflects a combination of:

- the formula treatment of pharmacy as a health science discipline to be funded at the "high intensity" rate;
- the relative priority for E&G needs among all other state government programs as determined by the Legislature;
- the relative needs of FAMU among the nine state universities as determined by the Chancellor and Regents;
- the relative needs of the School of Pharmacy among the 11 schools and colleges as determined by the FAMU President.

The UF College of Pharmacy's funding needs have been included in the request of JHMHC to the Governor and Legislature. As with other JHMHC components, requests for increased funding levels are individually justified rather than generated by formula. For all practical purposes, the allocation to the College is determined by the UF Vice President for Health Affairs once the appropriation to JHMHC is set by the Legislature.

Exhibit 21

Comparison of Funding Processes for Selected Programs Found in Both the E&G and Special Unit Budgets, FY90

Budget Activity	Pharmacy		Agriculture	
	FAMU	UF	FAMU	UF
Request	Part of SUS E&G Formula Generation	Incremental Needs Individually Justified	Part of SUS E&G Formula Generation	Incremental Needs Individually Justified
Appropriation Entity	E&G Budget	JHMHC Budget	E&G Budget	IFAS Budget
Allocation Steps:				
Among Universities	Among 9 Universities	Not Applicable	Among 9 Universities	Not Applicable
Among Colleges	Among 11 Colleges	Among 5 Colleges	Among 11 Colleges	Not Applicable
Among Departments	Not Applicable	Not Applicable	Among 4 Divisions	Not Applicable

Agriculture

The two agriculture programs also differ in a variety of programmatic characteristics, including the number of students served by level, as shown in exhibit 22. The IFAS instructional program clearly dwarfs its counterpart at FAMU, with undergraduate FTE being nearly 13 times greater at IFAS. Further, only IFAS offers graduate level instruction, which accounts for over 40% of its instructional load. Graduate programs typically cost significantly more per study to offer than undergraduate programs.

Exhibit 22

Comparison of Enrollment Levels for SUS Agriculture Programs, 1989-90

Characteristics	FAMU	UF
Undergradate Students		
Agriculture Majors	94	822
FTE Products	43	555
Graduate/Professional Students		
Agriculture Majors	0	631
FTE Products	0	387
Total Enrollment		
Agriculture Majors	94	1,453
FTE Products	43	942

In addition to the differences in their agriculture instruction programs, FAMU and UF also operate significantly different agricultural research and service programs. The UF program is designated as the 1862 "land-grant college" for the state while FAMU's program is recognized under the 1890 land-grant act. Universities across the nation with the 1862 designation receive the vast majority of federal support for experiment stations and cooperative extension services. The research and service components of IFAS are significant and, in fact, account for about 90% of overall IFAS funding levels. The expanded research and service mission at UF inevitably influences decisions about different funding levels, especially regarding faculty salary rates, for the agriculture instruction programs at the two universities.

The organizational and funding process differences between the two agriculture programs are even more significant than for the pharmacy programs. The FAMU Division of Agriculture is one of four divisions in the FAMU College of Engineering Science, Technology and Agriculture, which in turn is one of 11 schools and colleges in the university. Agriculture instruction at UF is offered through the College of Agriculture component of IFAS.

As shown earlier in exhibit 21, the FAMU budgeting process for agriculture is a part of the overall formula-driven process for the E&G budget entity, which results in limited visibility for the program at the state level. The program's ultimate funding level is the culmination of separate judgements by the Legislature (particularly in the case of special appropriations), the Chancellor and Regents, and -- most importantly -- the FAMU President and the College Dean. Funding for agriculture instruction at UF has been largely governed by legislative action alone.

6.3 Board of Regents Funding Formulas and Policies

As part of the New Funding Methodology developmental effort in 1987, the Legislature asked the Board of Regents to propose additional formulas for JHMHC, the USF Medical Center, and IFAS. The formulas developed by the Regents for these special units were generally derived from those being proposed for the E&G budget, but also recognized the unique needs of the special units. Exhibit 23 compares the staffing ratios and funding rates that apply to pharmacy and agriculture under the New Funding Methodology recommendations for the E&G and special unit budgets. (Note: Although this paper compares E&G and special unit formulas, the reader is reminded that neither of the NFM formula recommendations have been used by the Legislature in establishing the funding levels.)

Pharmacy is not a separate program element in either formula. Within the E&G formula, pharmacy is included along with nursing and other health professions in the health sciences discipline category which is funded at the rate for "high intensity" programs. Similarly, pharmacy at UF is funded in the same category as all other JHMHC programs except for medicine, dentistry and veterinary medicine. For most of the staffing ratios, the New Funding Methodology proposals for JHMHC provide for about twice as many staff per workload unit as for high intensity disciplines in the E&G budget formula. Once positions are established, the salary levels and other funding rates vary only slightly.

Agriculture instruction in the E&G budget is recommended for funding as a "medium intensity" discipline, but IFAS is funded at the more generous "high intensity" rates. This presumably reflects the fact that IFAS instruction is not only in agriculture but also in several of the sciences and engineering. The staffing ratios for IFAS for research and service, academic advising, academic administration and support staff also are more generous than for agriculture in the E&G budget. The differences in staffing ratios, if the

Exhibit 23

Comparison of Formula Factors in New Funding Methodology
for Comparable E&G and Special Unit Programs

Formula Factors	Pharmacy		Agriculture	
	FAMU	UF	FAMU	UF
Staffing Formulas				
Lower Level	31.60	14.72	32.50	31.60
Upper Level	24.20	11.27	25.60	24.20
Graduate Classroom	16.25	7.80	17.35	16.50
Thesis/Dissertation	6.00	2.84	7.00	6.00
Clinical	NA	10.00	NA	NA
Research & Service	4.42	3.00	3.15	2.00
Academic Advising	519.85	300.00	519.85	300.00
Academic Administration	9.18	9.00	9.18	9.00
Support Staff	2.80	1.50	2.80	1.50
Funding Rates				
Academic Positions	45,725	44,340	45,725	50,622
Support Positions	16,827	15,391	16,827	16,907
Other Personal Services	1,250	3,347	1,250	8,001
Operating Expense/DP	6,241	8,711	6,241	9,934
Operating Capital Outlay	2,832	2,956	2,832	2,372

Source: New Funding Methodology report, State University System of Florida, 1988

special unit formula recommendations were adopted, would provide IFAS with about 27% more academic positions than if it were funded as an E&G unit at the agriculture rates. FAMU's agriculture program, on the other hand, would receive about 23% more positions if funded at the IFAS formula rate.

6.4 Cost Comparisons

Formula-generated needs, however, have only limited impact on actual funding levels. In the case of FAMU, campus administrators have considerable flexibility in allocation decisions to deviate from the formula. Also, the New Funding Methodology formula recommendations for the special units have never been recognized by the Legislature. Therefore, in this section, we compare actual expenditure and budget levels for pharmacy and agriculture at FAMU and UF.

Expenditures per Student Credit Hour

The State University System conducts expenditure analyses annually using nationally recognized costing procedures. The same costing procedures are followed by each university for its E&G budget and by the special units for their separate budget entities. The latest available expenditure analysis data are for the 1989-90 fiscal year. Data for selected programs are listed in exhibit 24.

Exhibit 24
1989-90 Expenditure Analysis Results (Direct Cost per FTE Student)

	Health Science		Agriculture	
Cost Element	FAMU	UF	FAMU	UF
Lower Level	$2,239	$0	$10,312	$4,070
Upper Level	6,889	5,916	11,520	4,502
Graduate I	28,617	3,887	NA	9,505
Graduate II	14,150	20,298	NA	8,099
Research & Service	1,070	8,521	5,418	2,283
Academic Advising	252	1,582	1,853	261
Notes:	Includes all CIP 18 Programs	Includes all CIP 18 Programs	Includes all CIP 01 & 02 Programs	Includes all Resident Instruction Excludes Experiment Station & Cooperative Extension

Source: 1989-90 Expenditure Analysis, State University System of Florida

The most detailed level of reporting does not separate pharmacy from other health science disciplines (except for medicine, dentistry, and veterinary medicine). Agriculture, on the other hand, encompasses several related discipline categories (agribusiness, agricultural sciences, agricultural education, etc.). The results of the 1989-90 expenditure analysis are shown in exhibit 24 for the health sciences discipline category and for consolidated sets of agriculture-related disciplines.

The results for health sciences (which include pharmacy) show that instructional costs per student credit hour are somewhat higher at FAMU. But after research, service, and academic advising costs are considered, the costs at UF are slightly greater. Since these data also include other health disciplines, the cost differences for pharmacy between the two universities can not be isolated but generally appear to be similar.

For agriculture, FAMU spends substantially more per credit hour than UF. Most likely, this is the result of FAMU not being able to achieve an economy of scale in the operation of its program. FAMU reports 42.52 FTE students and 12.08 FTE academic positions, for a 3.5:1 student-faculty ratio. By comparison, UF reports 942.47 FTE students and 105.39 FTE academic positions, for a 8.9:1 student-faculty ratio. The apparent lower costs per FTE student for research and service at UF than at FAMU is potentially misleading, since UF's data do not include the costs of the agricultural experiment station and the cooperative extension service.

Budgeted Levels for Pharmacy

In an attempt to overcome the data aggregation problems in the expenditure analysis for pharmacy, we also analyzed the 1989-90 operating budgets for the pharmacy schools at FAMU and UF. In exhibit 25, we compare budgeted amounts per FTE student between the two schools by object of expenditure. Overall, the two programs appear to have been budgeted at essentially the same rate per FTE student in 1989-90. The actual funding difference on an ongoing basis might be greater due to the comparatively high expenditures per FTE at FAMU for Operating Capital Outlay (typically a non-recurring expenditure). Nonetheless, the modest difference can probably be attributed to the larger graduate program at UF.

6.5 Faculty Salary Comparisons

Faculty salaries for pharmacy programs were identified as a special concern during our background interviews with legislative staff and university personnel. Their source of concern dates back to the late 1980s when several supplemental appropriations were granted to the UF College of Pharmacy for the "enhancement of graduate education . . . to continue the plan to attain national prominence . . ." This special funding was not appropriated by the Legislature for the FAMU program and, accordingly, the Regents did not make any special provisions for pharmacy faculty salaries in the E&G allocation to FAMU.

Exhibit 25

Estimate of Pharmacy School Costs per Full-Time Equivalent Student Based on 1989-90 Operating Budgets

Budget Category	University of Florida		Florida A & M University	
	Amount	$ per Student	Amount	$ per Student
Salaries and Benefits	$4,868,429	$15,705	$2,365,777	$14,973
Other Personal Services	484,966	1,564	67,351	426
Operating Expense	519,290	1,675	264,827	1,676
Operating Capital Outlay	78,895	255	303,373	1,920
Data Processing	6,089	20	0	0
Total, All Categories	$5,956,669	$19,215	$3,001,328	$18,996
Full-Time-Equivalent Students	*310*		*158*	

Sources: University operating budget for FY90
University budget officers

In exhibit 26, we compare 1991 average faculty salaries by rank for the two pharmacy programs. In all but one category (associate professor), the UF average exceeds the rate for FAMU. The weighted average for the three major faculty ranks is only about 5% higher at UF ($3,145) than at FAMU. The difference increases to over 20% ($10,161), however, when other ranks (such as research scientist) and vacant positions are included.

6.6 Conclusions

Funding for programs which have had special unit status does appear to be higher than that for similar programs in the E&G budget. These differences in funding levels are the cumulative results of formula policy differences at the Regents's level and, perhaps more importantly, greater appropriations support by the Legislature.

An important issue is whether the programs are "comparable" (to use the terminology in the legislative proviso) rather than just similar. Differences in funding levels of the magnitude reported here could easily be justified if the Regents and Legislature intend the roles and missions of the corresponding programs to be significantly different. The Legislature has expressed its intent that the UF pharmacy program attain "national prominence." Further, the extensive research mission of IFAS requires that it offer highly competitive faculty salary rates which, in turn, affect instructional costs as well. These special missions, along with a much greater role in more costly graduate education, appear to underlie the funding differences.

Exhibit 26

Salary Rates for Pharmacy Faculty: Comparison of UF and FAMU Pharmacy Programs

Budgeted Rates for FY91

Faculty Rank	UF		FAMU		Difference
	Average	FTE	Average	FTE	
Full Professor	71,665	17.00	65,221	8.13	6,443
Associate Professor	54,579	11.00	56,732	4.25	(2,153)
Assistant Professor	47,076	6.00	46,231	1.75	845
Average, Regular Ranks	61,796	34.00	58,653	14.13	3,145
Other Ranks	54,452	8.00	35,026	2.25	19,426
Average, Filled Positions	60,399	42.00	54,508	16.38	5,890
Unfilled Positions	56,645	14.40	32,657	1.52	23,988
Overall Budgeted Average	59,440	56.40	49,280	17.90	10,161

7.0 ANALYSIS OF FIXED CAPITAL OUTLAY FUNDING PROCESS

Different funding processes are followed in developing the budgets for operations and for fixed capital outlay (i.e., facilities). These differences occur in the processes used by both the SUS and the Legislature. This chapter focuses on the equity of the funding approaches used to establish budgets for fixed capital outlay. Unlike appropriations for Educational and General operations in prior years which established separate budget entities for such special units as IFAS and the health centers, the capital outlay funding process has included all SUS entities.

7.1 Description of Facilities Funding Process

Funding for SUS facilities comes from a variety of sources. The largest single source over the past decade has been the Public Education Capital Outlay (PECO) Trust Fund which is based on the gross receipts tax on utility consumption in the state. The second largest source is the Capital Improvement Trust Fund (CITF) -- the building fee portion of the registration fee paid by each student each term. These two sources sometimes are supplemented by appropriations from the General Revenue Fund and the Educational Enhancement Fund (the Lottery), as well as by private gifts (which may attract state matching).

As seen in exhibit 27, about 75% of all capital outlay funds over the past decade were PECO appropriations (over $831 million). Approximately $195 million (18%) has been from student fees. General Revenue and Lottery funds have accounted for about 5% and 1.6%, respectively.

The funding process varies somewhat according to the source of funds. For the PECO appropriation, the universities are instructed to develop a three-year facilities development plan. These plans identify specific capital improvement project proposals, such as a library addition or a new parking lot. These facilities plans list the current capital needs on each campus in priority sequence. The universities are permitted to devise their own campus planning processes to develop their building priority lists.

In developing the annual systemwide capital outlay budget request, the SUS central office staff review each of the university priority lists. They consider projected space needs by type of space as determined by a facilities planning formula and the relationship of the proposed project to the universities' academic programs and goals, as contained in the Master Plan for the State University System. If a particular project has not been approved by an educational plant survey team sent by the Department of Education, the project is not eligible for inclusion on the SUS priority list. The plant survey teams rely on both formula-based calculations of space needs and an assessment of program requirements to evaluate proposed projects.

Exhibit 27

History of Appropriations to the State University Systme for Fixed Capital Outlay by Source of Funds 1982-83 Through 1991-92

Year	Source of Funding				
	PECO	General Revenue	Educational Enhancement (Lottery)	CIF	Total
1982-83	$58,437,592	$8,730,000	$0	$2,556,000	$69,723,592
1983-84	49,026,600	26,295,000	0	39,800,000	115,121,600
1984-85	36,660,450	13,631,972	0	0	50,292,422
1985-86	37,738,108	0	0	1,500,000	39,238,108
1986-87	86,625,651	150,000	0	70,000,000	156,775,651
1987-88	80,097,678	2,500,000	0	0	82,597,678
1988-89	74,691,003	0	0	0	74,691,003
1989-90	82,289,873	0	10,668,550	16,240,500	109,198,923
1990-91	122,147,928	5,200,000	3,615,000	65,000,000	195,962,928
1991-92	204,087,465	0	3,400,000	0	207,487,465
10-Year Total	$831,802,348	$56,506,972	$17,683,550	$195,096,500	$1,101,089,370
Percent	*75.5%*	*5.1%*	*1.6%*	*17.7%*	*100.0%*

Notes:
(1) PECO appropriations include a $40 million loan to Shands Hospital and amounts for for shared-use facilities at Brevard, Edison, Broward and Polk community colleges.
(2) PECO and General Revenue appropriations exclude amounts for library books and scientific/technical OCO.
(3) CIF amounts for 1983-84, 1986-87 and 1990-91 are three-year amounts.

The same space planning factors are used by both the SUS to develop five-year plans and the DOE team in conducting the plant surveys. The space factors recognize differences in the facilities needs of the universities and are based on such campus characteristics as program offerings, level of courses taken by students, library holdings, total positions, and the number of positions assigned to research (see exhibit 28 for a summary of the formula factors). The formula is used only as a general guide for determining facility requirements. Formula calculations are supplemented with judgements about special programmatic needs and whether projected enrollments are sufficient to generate (through the formula) a critical mass of each type of space.

The annual SUS priority list, which is developed within predetermined revenue limits established by the Commissioner of Education, also takes into account the continuing revenue requirements of projects in process (a single facility might receive an allocation from several different appropriations as it progresses from planning to site development to construction). The SUS priorities also may include such systemwide concerns as the need to respond to deferred maintenance, perform asbestos corrections, or implement other life safety improvements.

A preliminary SUS priority list is reviewed by the Capital Construction Committee, which includes representatives from each university, prior to approval by the Board of Regents and submission to the State Board of Education, the Governor and the Legislature.

The 1988 Legislature established the Facilities Enhancement Challenge Grant Program to encourage private donations for fixed capital outlay projects. The facilities planning process used for this program varies somewhat from the PECO process. For projects to be funded under this program, they must be included on the SUS Five-Year Project Priority List and be in support of instruction and research (rather than a facility for a support function). These projects require at least 50% of the total project cost to come from private sources and the state matches up to the other 50% from non-PECO sources. Selection of projects to be funded under this program are more influenced by the availability of private funds and the interests of the donor than formula-based space needs and the position of the project on the priority list.

The Capital Improvement Fee is used for nonacademic student-related facilities, such as student union buildings and recreational complexes. Since these projects are paid with student fees (currently $4.76 per semester credit hour), both student consultation and legislative appropriations are required. Additionally, the projects are to be included on the three-year facilities plans. Amounts available to each university are based on its contribution to the building and capital improvement fee fund.

7.2 Issues that Potentially Affect the Equity of Current Allocations

The analysis of the equity of capital outlay allocations requires a longer time frame than a single fiscal year. One reason for a multi-year perspective is that the nine universities differ in age and the size of their existing plants. Also, the universities may be experiencing different rates of enrollment growth. Finally, capital outlay appropriations

EXHIBIT 28

EXAMPLES OF SPACE PLANNING FACTORS
USED TO ESTIMATE FACILITIES NEEDS

Type of Space	Space Planning Factors
Classroom	Square Feet per Student Station: 22 Average Percent of Stations Occupied: 60% Average Hours of Use per Week: 58.5
Teaching Laboratory	Square Feet per Student Station: Varies by Discipline Average Percent of Stations Occupied: 80% Average Hours of Use per Week: 20-24 (varies by level) Minimum Allowance per Campus: 50,000 NASF
Library	1st 150,000 Volumes: .10 NASF/Volume 2nd 150,000 Volumes: .09 NASF/Volume Next 300,000 Volumes: .08 NASF/Volume Over 600,000 Volumes: .07 NASF/Volume Reading Rooms: 6.25 NASF per Undergraduate FTE Carrels: 7.50 NASF per Graduate I FTE 15.00 NASF per Graduate II FTE (Non-Science) 7.5 NASF per Graduate II FTE (Science) 1.00 NASF per Science Faculty FTE 5.00 NASF per Non-Science Faculty FTE Service Area: 5% of Reading, Study, & Stack NASF
Research Laboratory	Square Feet per Research Faculty FTE: 75-450 (varies by discipline) Square Feet per Beginning Graduate Student: 3-90 (varies by discipline) Square Feet per Advanced Graduate Student: 75-450 (varies by discipline)
Office	Square Feet per Position: 145
Auditorium/Exhibition	Square Feet per Student: 3 25,000 NASF Minimum Allowance
Instructional Media	5% of Classroom and Teaching Lab NASF
Student Services	Square Feet per Student: 7.5
Gymnasia	1st 5,000 FTE: 38,000 NASF Above 5,000 FTE: 3 NASF/FTE
Support Services	Square Feet: 5% of All Space Maintained

are related to specific building projects which may have individual costs exceeding several million dollars -- more than a smaller university's proportionate share in any single year.

Beyond these differences, the approach for analyzing the equity of capital outlay funding shares many features in common with the analysis of the E&G budget allocation. The most obvious similarity is the need to recognize differences in university missions. Universities with substantial research missions, for instance, require more space in the research laboratory category than universities with more of a teaching mission. Multiple measures are also needed. Just as the analysis of equity in the E&G budget can benefit from comparison of both student-faculty ratios and dollars per FTE student, the analysis of capital allocations is enhanced by consideration of square feet of space per student in addition to dollars allocated.

Existing Inventory of Facilities

Facilities in colleges and universities are classified according to the types of space they contain. Common categories include classrooms, teaching labs, research labs, offices, etc. University campuses vary from one another in their particular mix of space they have, as seen in exhibit 29. These differences reflect a combination of factors, including different missions, the size of the student body, and unmet needs. The University of Florida, for instance, has over 10% of its space classified as research labs, reflecting the importance of research in its mission, as contrasted to the University of North Florida, which has less than 1% of its space similarly classified.

When this same space is analyzed on a per student basis in exhibit 30, we find that net assignable square feet per FTE student varies from 30% below to 18% above the system average of 131 net assignable square feet per full-time-equivalent student (NASF/FTE). The differences appear to attributed to:

- the age of the university, with the older institutions tending to have higher NASF/FTE ratios;
- the mission of the university, especially noticeable in the research space category;
- the enrollment size of the campus, with some branch campuses not yet achieving economy of scale in their utilization of facilities.

Another important factor to consider in comparison of facilities across universities is the physical condition of the space and its adequacy for the intended uses. A variety of factors influence the condition of a building, such as leaking roofs, inadequate electrical and ventilation systems, and the presence of asbestos and other safety hazards. Functional adequacy can be affected by the size and configuration of individual rooms and the presence or absence of needed fixtures for laboratories.

EXHIBIT 29

INVENTORY OF NET ASSIGNABLE SQUARE FEET
BY CATEGORY OF SPACE USED IN CAPITAL OUTLAY BUDGETING
(Main and Branch Campuses Only, as of June 30, 1991)

Institution	Type of Space										
	Classroom	Teaching Laboratory	Library	Research Laboratory	Office	Auditorium/ Exhibition	Instructional Media	Student Services	Gymnasium	Support Services	Total
UF-Main Campus	204,023	281,710	357,570	476,841	949,338	173,089	37,913	400,373	221,362	200,489	3,302,708
FSU-Main Campus	189,615	250,189	341,526	336,346	780,879	107,616	33,772	242,434	169,976	167,582	2,619,935
FSU-Pan City Campus	13,864	954	0	260	18,424	3,257	5,535	4,987	0	1,819	49,100
Subtotal, FSU	203,479	251,143	341,526	336,606	799,303	110,873	39,307	247,421	169,976	169,401	2,669,035
FAMU-Main Campus	57,939	139,523	67,962	31,701	227,431	39,004	5,683	71,712	47,286	33,339	721,580
USF-Main Campus	135,546	232,178	201,382	158,333	566,359	80,497	23,778	170,066	129,532	96,864	1,794,535
USF-St Pete Campus	28,331	8,564	23,477	24,552	53,990	0	283	21,098	14,014	16,497	190,806
USF-Sarasota Campus	16,129	23,946	37,717	4,174	44,586	14,644	1,122	21,626	5,900	15,767	185,611
USF-Ft Myers Campus	15,565	1,725	0	502	24,521	0	460	660	3,780	0	47,213
Subtotal, USF	195,571	266,413	262,576	187,561	689,456	95,141	25,643	213,450	153,226	129,128	2,218,165
FAU-Main Campus	49,609	95,858	117,818	111,279	239,754	49,539	20,459	74,582	34,651	43,252	836,801
UWF-Main Campus	38,891	101,447	60,417	22,986	169,922	24,140	13,438	59,564	72,388	24,652	587,845
UCF-Main Campus	90,671	187,407	150,381	48,140	307,178	27,305	9,205	92,525	102,543	50,674	1,066,029
FIU-Main Campus	73,392	175,965	59,380	34,579	237,064	35,483	7,844	57,682	53,501	40,565	775,455
FIU-N Miami Campus	37,474	57,629	44,215	737	90,173	6,999	3,085	27,606	4,313	24,039	296,270
Subtotal, FIU	110,866	233,594	103,595	35,316	327,237	42,482	10,929	85,288	57,814	64,604	1,071,725
UNF-Main Campus	37,123	60,365	75,129	3,059	130,516	19,922	4,637	51,913	24,005	17,194	423,863
Total	988,172	1,617,460	1,536,974	1,253,489	3,840,135	581,495	167,214	1,296,828	883,251	732,733	12,897,751

Notes: Data are from 1991 Physical Facilities Space File. NASF of all owned facilities are included. No exclusions are made for unsatisfactory, temporary, or ineligible space. Includes space under construction as of June 30, 1991. Excludes 995,649 for UF parking garage.

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EXHIBIT 30

INVENTORY OF NET ASSIGNABLE SQUARE FEET PER FTE STUDENT
BY CATEGORY OF SPACE USED IN CAPITAL OUTLAY BUDGETING
(Main and Branch Campuses Only, as of June 30, 1991)

Institution	Type of Space										
	Classroom	Teaching Laboratory	Library	Research Laboratory	Office	Auditorium/ Exhibition	Instructional Media	Student Services	Gymnasium	Support Services	Total
UF-Main Campus	9	13	17	22	44	8	2	18	10	9	153
FSU-Main Campus	11	14	19	19	44	6	2	14	10	9	147
FSU-Pan City Campus	34	2	0	1	45	8	13	12	0	4	119
Subtotal, FSU	11	14	19	18	44	6	2	14	9	9	146
FAMU-Main Campus	10	25	12	6	41	7	1	13	8	6	130
USF-Main Campus	10	17	15	11	41	6	2	12	9	7	130
USF-St Pete Campus	26	8	21	22	49	0	0	19	13	15	174
USF-Sarasota Campus	30	44	69	8	82	27	2	40	11	29	341
USF-Ft Myers Campus	28	3	0	1	44	0	1	1	7	0	84
Subtotal, USF	12	17	16	12	43	6	2	13	10	8	138
FAU-Main Campus	9	18	22	20	44	9	4	14	6	8	154
UWF-Main Campus	10	25	15	6	42	6	3	15	18	6	145
UCF-Main Campus	8	17	14	4	28	3	1	8	9	5	98
FIU-Main Campus	8	20	7	4	26	4	1	6	6	5	86
FIU-N Miami Campus	14	21	16	0	33	3	1	10	2	9	109
Subtotal, FIU	9	20	9	3	28	4	1	7	5	6	91
UNF-Main Campus	9	15	19	1	32	5	1	13	6	4	104
System Average	10	17	16	13	39	6	2	13	9	8	132

In developing its formula-based estimates of facilities needs for each university, the SUS uses the concept of "adjusted current inventory," the net inventory after allowances for inadequate space. The difference between formula-estimated space requirements and adjusted current inventory is "unmet need." Unmet need can be addressed through either new construction or remodeling/renovation of existing facilities, depending on the local circumstances.

7.3 Analysis of the Equity of Recent Allocations

Exhibit 31 shows the results of a 1989 space needs analysis developed by SUS staff using then-current enrollment projections for 1997-98. It identifies total formula-estimated space needs, the adjusted current inventory, and unmet needs by type of space, university and campus. Also shown is how building projects which have already been approved and funded will impact need. The campuses vary considerably from each other in unmet need, with FIU-University Park at only 62% of its space needs being met while FSU, FAMU and UWF were calculated to have over 100% of their needs being satisfied.

Since the space needs analysis is based on projected enrollments, the needs are subject to change with each revision of the enrollment projections. During the past several years, enrollments have grown rapidly in the SUS, with some universities and campuses experiencing more rapid growth than others. In recognition of recent enrollment shifts, we developed a rough estimate of revised 1997-98 space needs based on more recent enrollment projections for that year. Even though our estimation technique lacks the comprehensiveness of the SUS model, it does show that relative needs for additional space have shifted in the two years since the SUS staff last updated their model. Based on our revised estimates, summarized in exhibit 32, no university now has more than 100% of its space needs already met.

Exhibit 33 lists the capital outlay allocations from PECO, general revenue, and lottery funds to each university over the past ten years separately for new construction and for major renovations. The exhibit also compares each university's percentage of capital outlay funding over the past three years with its percentage of unmet facility needs. Little correlation is observed between funding for new construction and unmet space needs. For instance, FIU was calculated to have 16% of the System's unmet needs in 1989, but it has received only 8% of the appropriation since that time.

One possible reason that funding does not always track objective estimates of needs is the challenge grant program for facilities funding. This program may tend to favor the more established universities with more alumni even though their proportion of unmet facilities is comparatively low. A second possible explanation, which was often identified during our interviews, is the presence of special interest politics which, in any given appropriation cycle, may favor certain universities or even individual projects. A final factor related to the equity of the allocation is the importance of the CITF in providing funds for new construction. Since CITF dollars generally stay with the university where they were collected, their allocation is not guaranteed to follow unmet needs. Data shown earlier in exhibit 31 shows that student-related facilities are much more plentiful at the older campuses.

Exhibit 31

Fixed Capital Outlay Space Needs in Net Assignable Square Feet for 1997-98 (Main and Branch Campuses Only, as of June 30, 1989)

	Type of Space										
Institution	Classroom	Teaching Laboratory	Library	Research Laboratory	Office	Auditorium/ Exhibition	Instructional Media	Student Services	Gymnasium	Support Services	Total
UF–Main Campus											
1997–98 Space Needs	188,481	257,920	645,373	741,129	750,639	67,184	21,366	167,985	90,194	173,429	3,094,820
Less Adjusted Inventory	193,967	260,258	349,698	414,454	730,745	48,844	13,207	153,061	145,296	80,727	2,390,277
Net Space Needs	(24,486)	(2,438)	296,675	326,675	20,094	18,350	8,159	14,924	(55,102)	92,702	694,543
Percent of Needs	114%	101%	54%	56%	97%	73%	62%	91%	161%	47%	77%
UF–IFAS On–Campus											
1997–98 Space Needs	8,948	26,983	9,439	421,565	278,280	3,675	1,896	9,187	0	25,729	783,520
Less Adjusted Inventory	18,677	45,583	3,771	363,982	196,483	0	858	361	0	58,094	693,619
Net Space Needs	(9,731)	(18,600)	5,668	57,583	81,797	3,675	1,038	8,826	0	(40,365)	89,901
Percent of Needs	240%	189%	40%	86%	71%	0%	39%	4%	NA	257%	89%
UF–Health Center											
1997–98 Space Needs	22,583	264,632	73,678	543,079	632,780	7,047	13,634	17,617	0	78,758	1,653,888
Less Adjusted Inventory	20,381	101,689	54,542	373,034	274,009	4,889	14,327	15,489	0	26,771	885,111
Net Space Needs	2,182	163,143	19,036	170,045	358,771	2,178	(693)	2,128	0	51,985	768,775
Percent of Needs	90%	38%	74%	69%	43%	69%	105%	88%	NA	34%	54%
UF–All Units/Campuses											
1997–98 Space Needs	199,000	549,535	728,390	1,705,793	1,661,899	77,916	36,896	194,789	90,194	277,914	5,522,226
Less Adjusted Inventory	231,045	407,530	408,011	1,151,480	1,201,237	53,713	28,192	168,911	145,296	173,592	3,969,007
Net Space Needs	(32,045)	142,105	320,379	554,313	460,662	24,203	8,504	25,878	(55,102)	104,322	1,553,219
Percent of Needs	116%	74%	56%	68%	72%	69%	77%	87%	161%	62%	72%
FSU–Main Campus											
1997–98 Space Needs	127,121	222,385	352,480	451,018	1,012,644	52,358	17,475	130,390	75,356	134,434	2,576,157
Less Adjusted Inventory	198,067	253,566	329,632	305,909	798,727	55,107	24,631	227,888	127,127	223,169	2,572,357
Net Space Needs	(68,946)	(31,201)	22,848	145,107	212,917	(32,751)	(7,156)	(96,978)	(51,771)	(88,735)	3,338
Percent of Needs	154%	114%	94%	68%	79%	163%	141%	174%	169%	166%	100%
FSU–Pan City Campus											
1997–98 Space Needs	2,894	2,073	2,788	620	3,747	1,173	238	2,933	0	813	17,077
Less Adjusted Inventory	15,139	1,829	0	0	18,212	3,307	3,348	7,026	0	220	49,075
Net Space Needs	(12,445)	244	2,788	620	(14,465)	(2,134)	(3,110)	(4,087)	0	593	(31,998)
Percent of Needs	562%	88%	0%	0%	486%	282%	1407%	239%	NA	27%	287%
FSU–All Units/Campuses											
1997–98 Space Needs	129,815	224,458	355,268	451,638	1,016,391	53,529	17,713	133,823	75,356	135,247	2,593,234
Less Adjusted Inventory	211,206	255,415	329,632	305,909	817,939	58,414	27,979	234,886	127,127	223,389	2,621,398
Net Space Needs	(81,391)	(30,957)	25,634	145,727	198,452	(34,885)	(10,266)	(101,063)	(51,771)	(88,142)	(28,662)
Percent of Needs	163%	114%	93%	68%	80%	166%	158%	176%	169%	165%	101%
FAMU–Main Campus											
1997–98 Space Needs	36,370	54,770	120,622	60,861	274,043	25,000	4,587	34,222	38,000	53,891	702,026
Less Adjusted Inventory	60,505	158,002	81,721	34,237	192,842	38,129	6,282	71,337	47,967	38,734	729,756
Net Space Needs	(24,135)	(103,232)	38,101	26,414	81,201	(13,129)	(1,725)	(37,115)	(9,967)	14,857	(27,730)
Percent of Needs	166%	284%	68%	56%	70%	153%	138%	208%	126%	72%	104%
USF–Main Campus											
1997–98 Space Needs	117,862	194,733	267,787	294,011	726,140	46,245	15,135	115,613	89,245	109,450	1,888,321
Less Adjusted Inventory	120,581	206,240	167,234	117,229	428,799	39,105	14,458	68,542	114,803	48,245	1,344,005
Net Space Needs	(2,569)	(21,507)	100,553	176,783	298,341	7,140	677	47,071	(45,358)	60,205	622,316
Percent of Needs	102%	112%	65%	40%	59%	85%	96%	59%	166%	45%	88%
USF–St Pete Campus											
1997–98 Space Needs	9,723	6,371	59,097	25,884	50,111	3,765	805	9,412	0	12,523	177,471
Less Adjusted Inventory	23,649	8,867	23,713	20,544	47,801	5,263	0	20,734	19,520	13,963	184,074
Net Space Needs	(13,926)	(2,496)	35,384	5,120	2,310	(1,498)	805	(11,322)	(19,520)	(1,440)	(6,603)
Percent of Needs	243%	139%	40%	80%	95%	140%	0%	220%	NA	112%	104%
USF–Sarasota Campus											
1997–98 Space Needs	7,818	2,988	65,014	4,372	36,502	2,880	539	7,200	0	9,803	136,800
Less Adjusted Inventory	15,466	13,412	38,937	5,181	30,949	13,570	1,358	12,574	0	3,405	134,834
Net Space Needs	(7,648)	(10,448)	26,077	(789)	5,553	(10,690)	(819)	(5,374)	0	6,200	2,066
Percent of Needs	198%	452%	60%	118%	85%	471%	252%	175%	NA	35%	98%
USF–Ft Myers Campus											
1997–98 Space Needs	3,403	2,153	26,329	1,787	9,308	1,407	278	3,510	0	3,759	51,942
Less Adjusted Inventory	11,615	3,998	442	502	11,814	0	464	980	4,200	0	33,486
Net Space Needs	(8,212)	(1,845)	25,887	1,285	(2,306)	1,407	(186)	2,858	(4,200)	3,759	18,447
Percent of Needs	341%	186%	2%	28%	125%	0%	167%	19%	NA	0%	64%
USF–All Units/Campuses											
1997–98 Space Needs	138,807	196,223	438,227	325,834	822,061	54,297	16,757	136,743	89,245	136,340	2,332,634
Less Adjusted Inventory	171,286	232,517	250,326	143,436	517,163	57,938	16,280	102,510	138,323	66,636	1,696,408
Net Space Needs	(32,373)	(36,294)	187,901	182,398	304,898	(3,641)	477	33,233	(69,078)	69,704	636,226
Percent of Needs	123%	118%	57%	44%	63%	107%	97%	76%	200%	49%	73%

Exhibit 31 (Continued)

Institution	Type of Space										
	Classroom	Teaching Laboratory	Library	Research Laboratory	Office	Auditorium/ Exhibition	Instructional Media	Student Services	Gymnasium	Support Services	Total
FAU-Main Campus											
1997-98 Space Needs	58,144	81,801	121,573	90,403	413,795	25,000	6,987	55,026	45,011	58,912	956,984
Less Adjusted Inventory	52,196	80,709	119,625	99,428	203,923	46,641	15,548	62,073	33,828	3,165	716,136
Net Space Needs	5,948	1,093	1,948	(8,025)	209,872	(21,641)	(8,561)	(7,046)	11,183	55,747	240,529
Percent of Needs	90%	99%	98%	109%	49%	187%	222%	113%	75%	5%	75%
UWF-Main Campus											
1997-98 Space Needs	31,151	50,000	87,089	27,299	198,084	25,000	4,057	29,467	38,000	26,406	526,533
Less Adjusted Inventory	33,067	82,253	58,251	20,346	148,246	33,209	9,926	60,539	72,803	22,811	538,447
Net Space Needs	(1,916)	(32,253)	38,818	6,954	51,838	(8,209)	(5,868)	(31,072)	(34,803)	3,595	(12,914)
Percent of Needs	106%	165%	80%	75%	74%	133%	245%	205%	192%	58%	102%
UCF-Main Campus											
1997-98 Space Needs	81,784	109,712	143,245	90,364	449,465	30,615	9,574	78,537	53,615	52,245	1,097,136
Less Adjusted Inventory	87,728	133,251	146,631	27,843	281,679	43,749	12,254	63,044	98,344	41,486	936,029
Net Space Needs	(5,944)	(23,539)	(2,386)	62,481	167,786	(13,134)	(2,680)	13,493	(44,729)	10,779	162,107
Percent of Needs	107%	121%	102%	31%	63%	143%	128%	82%	183%	79%	85%
FIU-Main Campus											
1997-98 Space Needs	84,647	119,249	151,733	62,939	388,621	31,758	10,195	79,387	54,755	49,686	1,042,967
Less Adjusted Inventory	73,747	131,996	55,719	47,146	122,419	20,746	11,412	40,601	41,319	13,534	558,639
Net Space Needs	10,900	(12,747)	96,084	15,793	276,202	11,009	(1,217)	38,786	13,436	36,132	484,356
Percent of Needs	87%	111%	37%	75%	31%	65%	112%	51%	75%	27%	54%
FIU-N Miami Campus											
1997-98 Space Needs	15,400	17,489	43,656	20,048	139,207	6,584	1,843	16,410	0	13,020	273,417
Less Adjusted Inventory	27,172	37,287	58,067	737	63,741	9,998	3,085	21,431	0	21,711	237,230
Net Space Needs	(11,772)	(19,819)	(11,408)	19,309	75,466	(435)	(1,442)	(5,021)	0	(8,691)	36,187
Percent of Needs	176%	213%	126%	4%	46%	107%	184%	131%	NA	167%	87%
FIU-All Units/Campuses											
1997-98 Space Needs	100,047	136,717	195,442	82,965	537,926	38,319	11,838	95,797	54,755	62,686	1,316,414
Less Adjusted Inventory	100,919	169,283	110,786	47,883	186,160	27,745	14,497	62,032	41,319	35,245	795,889
Net Space Needs	(872)	(32,566)	84,656	35,102	351,568	10,574	(2,659)	33,765	13,436	27,441	520,545
Percent of Needs	101%	124%	57%	58%	35%	72%	122%	65%	75%	56%	60%
UNF-Main Campus											
1997-98 Space Needs	30,668	50,000	81,541	15,565	144,964	25,000	4,033	29,183	38,000	20,948	439,902
Less Adjusted Inventory	36,235	45,818	76,870	4,507	133,241	25,737	4,470	34,053	21,670	15,930	398,533
Net Space Needs	(5,567)	4,182	4,671	11,058	11,723	(737)	(437)	(4,872)	16,330	5,018	41,369
Percent of Needs	118%	92%	94%	29%	92%	103%	111%	117%	57%	76%	91%
SUS Total											
1997-98 Space Needs	605,868	1,453,316	2,281,575	2,850,530	5,518,530	354,676	112,222	784,569	502,176	623,289	15,486,769
Less Adjusted Inventory	964,181	1,564,777	1,560,853	1,834,107	3,680,430	415,272	135,426	958,387	726,677	620,968	12,402,080
Net Space Needs	(178,315)	(111,461)	720,722	1,016,423	1,838,100	(60,596)	(23,206)	(74,798)	(224,501)	202,321	3,084,688
Percent of Needs	122%	108%	68%	64%	67%	117%	121%	110%	145%	75%	80%

Exhibit 32

Revised Estimate of 1997-98 Unmet Space Needs
Derived from November 1989 Estimates with New FTE Projections

University	1989 Adjusted Inventory	Original 1997-98 Space Needs	Previous 1997-98 FTE Projection	Estimated Space Needs per FTE	Current 1997-98 FTE Projection	Revised 1997-98 Space Needs	Unmet Needs	Percent of Need Being Met	Percent of SUS Unmet Needs
UF	2,390,277	3,084,820	22,398	138	26,308	3,623,334	1,233,057	66%	21%
FSU	2,821,896	2,593,234	17,843	145	23,413	3,393,720	571,824	83%	10%
FAMU	729,756	702,026	4,563	154	8,068	1,241,277	511,521	59%	9%
USF	1,736,408	2,332,904	18,099	129	21,752	2,781,429	1,045,021	62%	18%
FAU	770,135	956,664	7,337	130	11,558	1,507,036	736,901	51%	12%
UWF	539,447	526,533	3,929	134	5,436	728,489	189,042	74%	3%
UCF	1,045,353	1,097,136	10,205	108	14,331	1,540,721	495,368	68%	8%
FIU	888,877	1,316,414	12,773	103	18,483	1,850,299	961,422	48%	16%
UNF	438,033	439,902	3,891	113	5,562	628,819	190,786	70%	3%
SUS Totals	11,360,182	13,049,633	101,038	129	134,911	17,295,124	5,934,942	66%	100%

Exhibit 33

Summary of PECO, General Revenue, and Lottery Appropriations for Fixed Capital Outlay, by University and by Year, FY83 to FY92

Fiscal Year and Project Type		UF	FSU	FAMU	USF	FAU	UWF	UCF	FIU	UNF	SUS
FY83	New Construction/Expansion	10,100,000	6,924,650	5,650,000	17,230,000	4,014,280	142,000	7,343,798	6,980,000	0	58,384,728
	Remodeling/Renovation/etc.	3,610,897	1,515,784	590,495	1,181,804	343,404	284,840	323,994	598,227	355,621	8,782,866
	Total for Fiscal Year	13,710,897	8,440,434	6,240,495	18,411,804	4,357,684	406,840	7,667,790	7,578,227	355,621	67,167,592
FY84	New Construction/Expansion	9,217,850	2,975,000	75,000	33,920,000	18,000,000	2,750,000	3,298,760	875,000	0	69,011,600
	Remodeling/Renovation/etc.	2,042,168	868,822	511,028	1,181,858	220,678	372,838	247,428	304,010	131,172	5,880,000
	Total for Fiscal Year	11,260,018	3,743,822	586,028	35,101,858	18,220,678	3,122,838	3,546,178	1,179,010	131,172	74,891,600
FY85	New Construction/Expansion	11,180,000	7,200,000	500,000	17,258,872	566,289	200,000	784,000	7,200,000	0	44,382,261
	Remodeling/Renovation/etc.	1,828,203	952,491	379,172	682,714	357,104	134,901	233,828	244,385	597,383	5,410,181
	Total for Fiscal Year	13,018,203	8,152,491	879,172	17,942,686	925,393	334,901	997,828	7,444,385	597,383	50,292,422
FY86	New Construction/Expansion	5,900,000	6,000,000	6,000,000	1,387,000	1,803,000	0	780,000	2,150,000	1,000,000	24,800,000
	Remodeling/Renovation/etc.	5,057,202	2,378,712	1,841,466	1,406,981	907,030	272,438	404,068	444,152	178,081	12,888,108
	Total for Fiscal Year	10,957,202	8,378,712	7,841,466	2,793,981	2,510,030	272,438	1,184,068	2,594,152	1,178,081	37,488,108
FY87	New Construction/Expansion	14,650,000	500,000	950,000	7,634,000	9,549,420	500,000	5,290,000	10,300,000	4,000,000	58,373,420
	Remodeling/Renovation/etc.	8,888,511	7,478,517	4,198,265	4,988,335	888,601	723,125	1,918,131	733,297	591,449	30,402,231
	Total for Fiscal Year	23,538,511	7,978,517	5,148,265	12,622,335	10,438,021	1,223,125	10,208,131	11,033,297	4,591,449	88,775,651
FY88	New Construction/Expansion	11,826,988	400,000	8,281,275	1,905,880	1,982,440	8,400,000	2,830,000	12,800,000	500,000	46,926,573
	Remodeling/Renovation/etc.	13,410,338	11,453,273	2,642,904	2,422,412	934,601	651,173	1,112,071	2,897,727	348,808	35,871,105
	Total for Fiscal Year	25,237,327	11,853,273	8,924,179	4,328,281	2,917,041	9,051,173	3,942,071	15,497,727	848,808	82,597,678
FY89	New Construction/Expansion	5,940,165	4,713,043	383,448	10,200,000	8,800,810	700,000	10,880,000	3,886,000	0	45,285,484
	Remodeling/Renovation/etc.	9,390,213	4,098,234	8,148,385	2,038,830	952,209	297,735	766,700	1,833,905	3,879,328	29,405,539
	Total for Fiscal Year	15,330,378	8,811,277	8,611,831	12,238,830	9,553,019	997,735	11,646,700	5,721,905	3,879,328	74,691,003
FY90	New Construction/Expansion	10,578,000	4,956,957	0	12,478,405	3,148,674	8,535,387	1,800,000	7,338,000	400,000	47,029,423
	Remodeling/Renovation/etc.	17,640,223	9,975,381	5,636,792	2,758,390	5,870,545	286,448	1,870,882	1,943,305	181,054	45,929,000
	Total for Fiscal Year	28,218,223	14,932,338	5,636,792	15,234,795	9,017,219	8,801,835	3,270,882	9,281,305	581,054	92,958,423
FY91	New Construction/Expansion	3,935,000	17,590,000	1,100,000	17,243,150	13,784,550	1,045,842	1,190,000	13,010,000	6,750,000	75,648,551
	Remodeling/Renovation/etc.	24,110,092	11,585,387	4,113,087	4,992,372	3,571,294	938,593	4,984,141	837,004	472,407	55,084,377
	Total for Fiscal Year	28,045,092	29,155,387	5,213,087	22,235,522	17,355,853	1,984,435	6,154,141	13,847,004	7,222,407	130,712,928
FY92	New Construction/Expansion	19,672,807	53,185,500	7,418,388	10,988,100	10,056,527	820,514	3,237,750	9,200,000	1,000,000	115,559,384
	Remodeling/Renovation/etc.	26,842,737	21,742,072	3,323,144	21,138,358	8,186,150	1,603,529	4,720,770	3,473,244	1,800,099	90,928,101
	Total for Fiscal Year	46,515,344	74,927,572	10,741,510	32,104,458	18,242,677	2,424,043	7,958,520	12,673,244	2,800,099	206,487,485
TOTAL	New Construction/Expansion	103,008,811	104,345,150	28,338,087	130,224,498	80,305,990	21,093,743	40,194,298	73,741,000	13,650,000	583,901,382
	Percent	18%	18%	5%	22%	12%	4%	7%	13%	2%	100%
	Remodeling/Renovation/etc.	112,818,584	72,026,673	29,182,738	42,789,832	20,231,618	5,225,820	16,365,969	12,907,256	8,813,180	320,161,456
	Percent	35%	22%	9%	13%	6%	2%	5%	4%	3%	100%
	Total for Ten-Year Period	215,827,195	176,371,823	57,520,825	173,014,328	98,537,615	26,319,563	56,560,265	86,648,256	22,263,180	904,062,870
	Percent	24%	20%	6%	19%	11%	3%	6%	10%	2%	100%
FY93-95	New Construction/Expansion	34,183,807	75,732,457	8,518,388	40,687,655	26,887,760	8,401,743	8,027,750	29,548,000	6,150,000	238,237,338
	Percent	14%	32%	4%	17%	11%	4%	3%	12%	3%	100%
	Remodeling/Renovation/etc.	66,583,052	43,282,840	13,073,023	28,887,118	15,627,986	2,508,570	11,361,773	8,053,553	2,533,560	191,921,476
	Percent	36%	23%	7%	15%	8%	1%	6%	3%	1%	100%
	Total for Three-Year Period	102,776,859	119,015,297	21,591,389	69,574,773	42,515,749	10,910,313	17,389,523	35,601,553	10,683,560	430,158,818
	Percent	24%	28%	5%	16%	10%	3%	4%	8%	2%	100%
	Percent of SUS Unmet Need	*21%*	*10%*	*9%*	*18%*	*12%*	*3%*	*9%*	*16%*	*3%*	*101%*

8.0 IMPLICATIONS OF LUMP SUM BUDGETING ON THE EQUITY OF FUNDING PROCESSES FOR CURRENT OPERATIONS

8.1 Description of State Budget Control Structures

Prior to July 1, 1991, the SUS was subject to most of the budget and expenditure control regulations that apply to regular state agencies. Under these provisions, the ability to shift funding among program components, expenditure categories and budget entities was greatly limited. For instance, dollars appropriated for library OCO (i.e., book purchases) could not be expended for biology laboratory equipment. Likewise, dollars for custodial wages in the physical plant could not be used to pay a secretary in the English department. At UF and USF, with their special unit budget entities, the presidents did not have authority to reallocate a faculty position from the college of nursing in the medical center budget entity, for example, to the college of arts and sciences in the E&G budget entity.

This general approach to state-level budget control has been in place for many years and was in effect when the NFM and its predecessor formulas were developed. Perhaps in an effort to accommodate the budget control structure, separate formulas typically have been designed to estimate funding requirements for discrete program component / appropriation category / budget entity combinations. For example, the NFM has a library resources (OCO) formula and an I&R position and salary formula.

In its 1991 session, the Legislature passed an "SUS management flexibility bill" that provides the Board of Regents with greater authority to manage its financial resources with fewer restrictions from the Legislature and the Governor. Under these provisions,

> "*... funds appropriated to the State University System for each program category, lump sum, or special category may be transferred to traditional categories for expenditure by the Board of Regents.*"

Also, the Board of Regents now may

> "*... transfer or reallocate funds to or among accounts established for each university within each budget entity . . .*"

The BOR's 1991-92 allocation document contains two graphics, which have been reproduced here, that illustrate some of the effects of the new management flexibility on budget control. Exhibit 34 shows how the prior E&G, IFAS, and medical center budget entities have been consolidated into a new E&G budget entity. In exhibit 35, the combination of numerous program components into a smaller number of lump sums and special categories is illustrated.

Exhibit 34

Consolidation of Budget Entities
Under Lump Flexibility

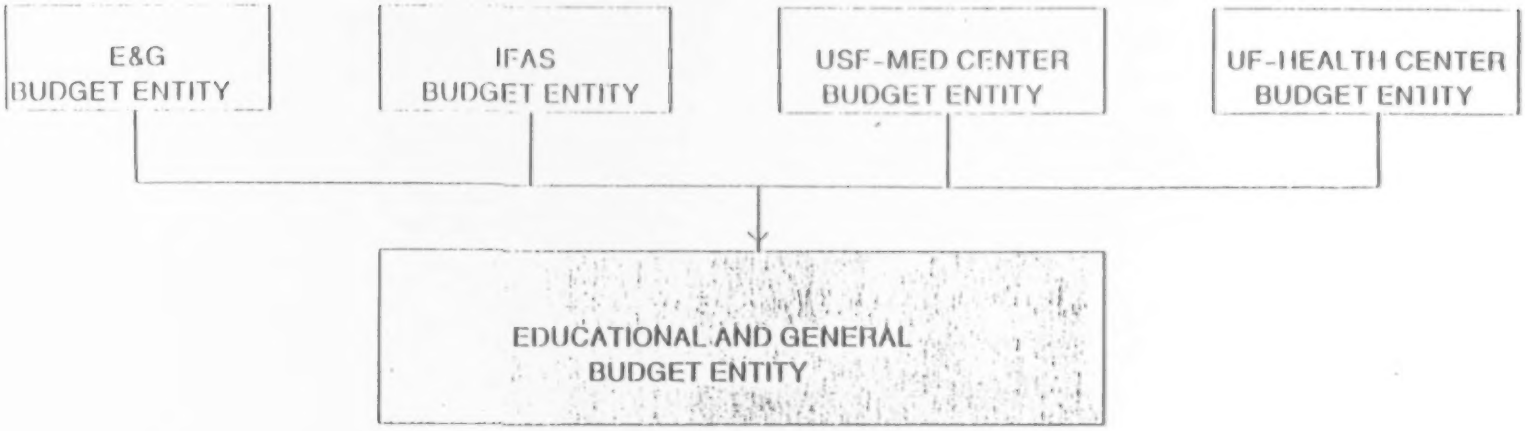
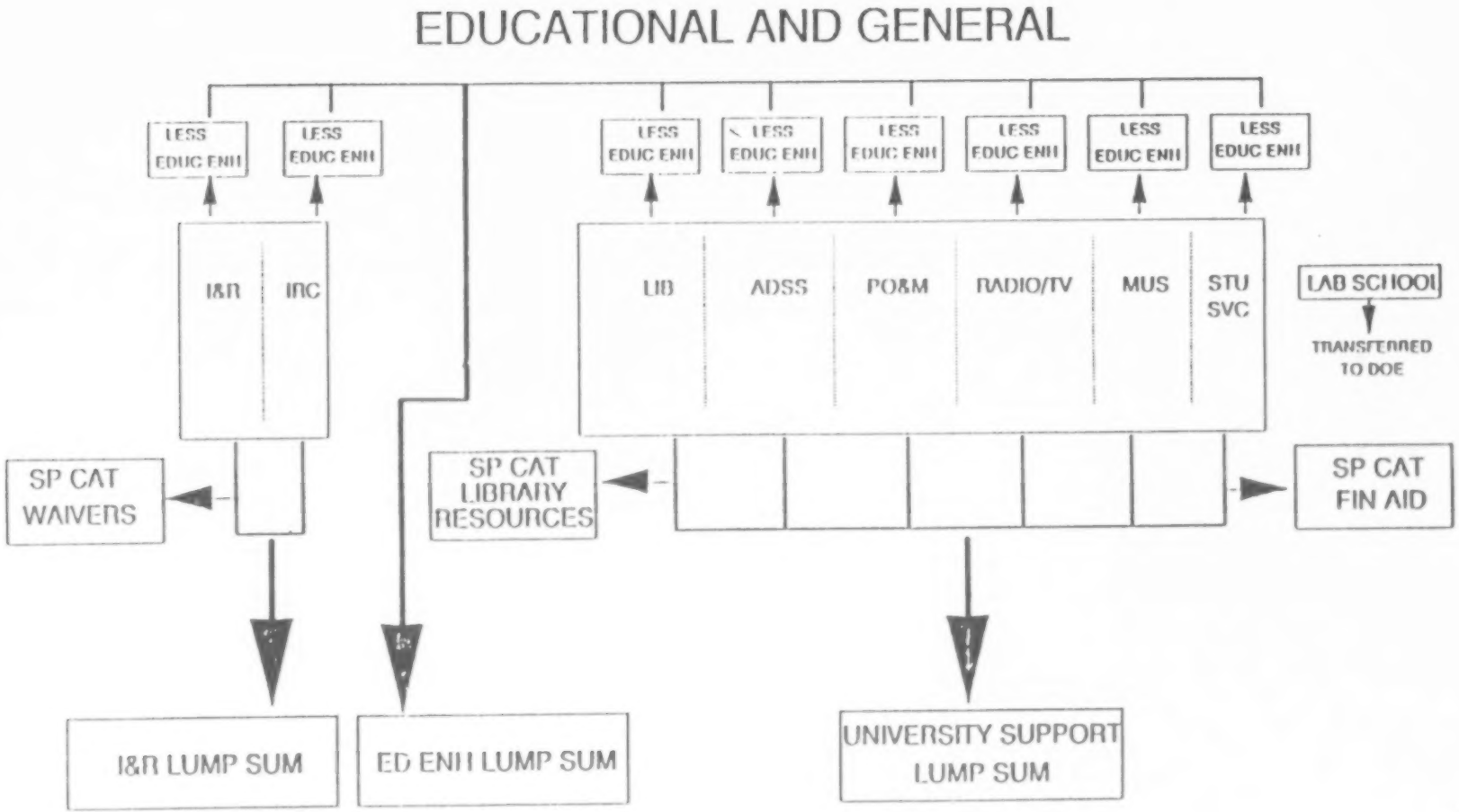


Exhibit 35

Combinations of Program Components
Under Lump Sum Flexibility



8.2 Potential Realignment of Request and Allocation Structures with Control Structure

The impact of this legislation on the funding process for the SUS has yet to be completely determined. Part of the uncertainty relates to a previous, short-lived experiment with lump sum flexibility, which ended with the subsequent reinstatement of controls at their previous levels. In a period of transition, the Board of Regents has retained much of the control structure on the universities that previously was imposed from outside the System.

A topic of current discussion is whether the NFM formulas should be retained, whether alternative formulas that correspond to the new lump sum and special categories should be developed, or whether a totally different approach to funding should be implemented. Some fear that the continued use of detailed formulas that correspond to the old budget control categories will invite the reinstatement of controls on the universities.

The use of detailed budget formulas by other state university systems does not appear to be contingent on the existence of detailed state-level budget controls. As seen earlier in exhibit ?????, most of the other SREB states have separate formulas for each of the major program components, and many have formulas in more functional components than Florida. None of these states, however, is subject to the type or degree of budget controls previously faced by the SUS.

The same general problem has been faced by university systems in other states that do not rely heavily on formulas, even in those states where there is not a history of detailed budget controls or extensive legislative involvement in specifying how funds should be used. The dilemma is clear. Detailed spending plans to justify funding requests, e.g., more money to purchase scientific equipment, usually are much more effective in convincing state-level budget authorities that increased funding is merited. On the other hand, these same detailed requests create a reasonable expectation that the funding, if granted, will be used for the stated purpose.

The solution reached in other states appears to be based on realistic expectations by state budget officials and vigilance by higher education officials. State budget officials have learned to trust campus leaders to allocate available resources wisely and they rely on their power to approve the next appropriation instead of controlling the current allocation. University leaders continually review their formulas or other budget justifications to ensure that they match actual spending plans. In other words, the absence of detailed budget controls seems to have little effect on how university leaders approach the task of building their case for continued funding.

Not only are moderately detailed formulas effective in justifying the requested appropriation levels, they are even more valuable for demonstrating that available funds have been shared equitably among the state's colleges and universities. Formulas that generally reflect actual spending practices seldom encounter concerns about either budget control or equity.

9.0 SUMMARY AND RECOMMENDATIONS

This chapter contains a series of recommendations for the Board of Regents, the Postsecondary Education Planning Commission and the Florida Legislature to consider as they refine the SUS funding process. The recommendations are grouped according to the three major components of the study:

1) a comparison of the design and execution of the legislative and SUS funding processes

2) an analysis of the equity of the New Funding Methodology as an allocation technique

3) an analysis of the equity of the fixed capital outlay budgeting process

The recommendations vary considerably from one another in their coverage and include both policy and technical considerations. Some of the recommendations may require legislation to implement while others only involve the redesign of current reporting systems by staff.

Overall, 21 specific recommendations are offered. These recommendations are summarized in exhibit 36.

9.1 Design of Legislative and SUS Formulas

Topic 1.1: Continuing Use of Separate Formula Designs

Synopsis of Issue: Although the Legislature directed the SUS to develop what is now known as the New Funding Methodology (NFM), the Legislature has failed to specifically adopt, reject or amend the NFM recommendations. The SUS develops its appropriations request using concepts from the NFM, then the Legislature uses a variant of the 1956 Brumbaugh formula to evaluate the request, and finally the SUS uses a combination of both the NFM and the legislative formula approach to allocate resources. The use of different formula bases impairs communication about both the current budget situation and the request. For instance, the legislative and BOR staff often can not agree on how many academic positions have been appropriated to the SUS.

Documentation: In their testimony to PEPC, legislative and SUS budget personnel confirmed that different formula structures are being used. Our analysis shows that the number of positions generated by the two Instruction and Research (I & R) formulas, using actual 1990-91 enrollments, differed by more than 400 academic positions and 100 I&R support positions.

Exhibit 36

List of Topics for Recommendations

1.0 Design of Legislative and SUS Formulas

- 1.1 Continuing Use of Separate Formula Designs
- 1.2 Alignment of Formula Factors with Actual Experience
- 1.3 Assignment of Individual Disciplines Among the High, Average and Low Intensity Discipline Groupings
- 1.4 Development of a System to Compare Formula Recommended and Actual Student-Faculty Ratios at the Graduate Level
- 1.5 Formula Treatment of Support Program Components
- 1.6 Adequacy of Funding for a Competitive University System
- 1.7 Impact of Lump-Sum Flexibility on the Funding Process

2.0 Equity of SUS Allocation Process

- 2.1 Hold Harmless Policy
- 2.2 Variance Between Planned and Actual Enrollments
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3.0 Equity of the Capital Outlay Budgeting Process

- 3.1 Use of Space Planning Standards in the Capital Outlay Budget
- 3.2 Space Planning Standards that Reflect Trends in Program Needs
- 3.3 Planning for Facilities to Accommodate Projected Enrollment Growth
- 3.4 Consolidation of Capital Outlay Funding Sources

Recommendation: The Legislature and SUS should adopt a new, common formula approach (hereafter referred to in this document for convenience as the "consensus formula") for use in the appropriation request. Given the different purposes of a funding formula at different phases in the budget cycle, the allocation formula should be somewhat more detailed than the request formula, but retain the same overall structure.

Topic 1.2: Alignment of Formula Factors with Actual Experience

Synopsis of Issue: Various factors in the budget formulas, e.g., the student-faculty staffing ratios, bear little resemblance to actual resource utilization patterns. On one hand, the lack of reality in the staffing ratios undermines confidence in the formula and can contribute to perceptions of inequity in the treatment of individual universities. But on the other hand, some of the formula factors were intended to represent legislative priorities. The key issue is whether the formula should represent long-term funding goals and standards or should fluctuate in response to campus spending practices. Neither the NFM or the legislative funding process are consistent in this regard, partly relying on long-term normative standards and partly on annual updates of recent experience.

Documentation: Of the nine program components in the NFM, three have formulas based on long-term normative standards and the remaining six components are recomputed annually based on recent expenditure rates. Comparisons of academic positions by level show that the legislative formula for I&R, the formula component that most consistently has been based on long-term norms, generates more positions for undergraduate education (a legislative priority) and fewer for graduate instruction and research than the NFM. Past experience, as reported in the SUS expenditure analysis, typically shows that the actual number of positions by instructional level and function is somewhere in between the two formula-generated amounts.

Recommendation: The new consensus formula should express long-term normative staffing relationships and not change on an annual basis. The initial norms, however, should be based on actual experience (prior to recent budget reductions) while still permitting special exceptions to reflect judgement about what is required for quality programs and plans to respond to broad legislative direction.

Topic 1.3: Assignment of Individual Disciplines Among the High, Average and Low Intensity Discipline Groupings

Synopsis of Issue: The NFM combines 32 disciplines into three broad groupings to achieve a more simple formula presentation. The three groupings were selected to represent the "intensity" of instruction. Two issues arise in developing aggregate discipline categories. The first issue is whether only three groupings are adequate to reflect the great diversity of the program offerings. The second issue, which would apply regardless of the number of categories, is whether the individual disciplines have been assigned to the most appropriate category.

Documentation: Results of a survey by SREB of funding practices in its 15-member states show that higher education funding formulas typically have more than three discipline groupings, with 10-20 groupings being most common when all disciplines are not listed individually. Using 1989-90 expenditure analysis results, our comparison of actual academic staffing ratios shows that 12 of the 32 disciplines (37%) have ratios that more closely match a different intensity grouping than the one to which they are assigned under the NFM.

Recommendation: The new consensus formula should expand the concept of discipline differentiation in the I&R formula. The discipline groupings should be based on national norms and documented differences in instruction and research staffing practices in the disciplines.

Topic 1.4: Development of a System to Compare Formula Recommended and Actual Student-Faculty Ratios at the Graduate Level

Synopsis of Issue: Both the legislative and NFM formulas recognize four levels of instruction: lower, upper, graduate classroom and graduate thesis/dissertation. Legislative staff have expressed concern that the NFM staffing ratios do not reflect either legislative priority or actual practice, especially at the graduate level. The annual expenditure analysis is the primary tool through which the SUS can monitor differences between actual and formula staffing rates. Although the expenditure analysis also has four instructional levels, its graduate categories are graduate I and graduate II (which roughly correspond to masters and doctoral-level instruction) rather than graduate classroom and thesis/dissertation. The difference in reporting categories prevents verification of whether formula differences at the graduate level are justified.

Documentation: Accurate student-faculty ratios at the graduate level are important to ensure equity since the thesis/dissertation element in the instructional formula provides about 2.5 times more funding per credit hour than graduate classroom instruction. Further, nearly 70% of all thesis/dissertation funding is allocated to only two universities.

Recommendation: Once the new consensus formula is adopted, the SUS should modify its expenditure analysis reporting categories to conform with the formula categories.

Topic 1.5: Formula Treatment of Support Program Components

Synopsis of Issue: In addition to their differences in the I&R program component, the legislative and NFM formulas vary in their treatment of the support program components. In some cases, the long-term staffing ratios and current year funding rates for the formula factors vary, e.g., the ratios for libraries and for plant operations and maintenance. As with the I&R formula situation, the difference in approaches contributes to disagreement and confusion about what has been funded and what is required for the request year. In other cases, the legislative approach simply is not based on the NFM formula but instead considers incremental needs from one year to the next, e.g., the

processes for the administrative support and for the student services components. The absence of formula approaches may result in inadequate attention to the funding needs of the support programs.

Documentation: Testimony of legislative and SUS budget staff identified those components where different practices are used to assess the funding needs of support areas. Longitudinal analyses developed by the universities illustrate how funding levels for various support functions have not kept pace with the growth in workload or price level increases over the past decade. Further, their analyses indicate that funding in the support areas has not maintained a proportional relationship with funding for the primary program components.

Recommendation: As part of the consensus formula development process, the funding needs of all major support program components should be based on a formula approach.

Topic 1.6: Adequacy of Funding for a Competitive University System

Synopsis of Issue: Over the past decade or more, the state has a made significant commitment towards developing and maintaining a nationally competitive university system. In 1987, for instance, Florida's national ranking in support of its universities had increased to 6th among the fifty states in state and local appropriations per FTE student, compared to 34th in 1979. The combination of the state's tax revenue shortfalls and the rapid enrollment growth in the SUS over the past two years, however, has caused per-student funding to drop and has renewed concerns about the quality of the universities. Neither the legislative formula nor the NFM explicitly incorporate a method for maintaining nationally competitive funding levels for the state's universities.

Documentation: Analyses prepared by the SUS staff show that total state appropriations (general revenue and lottery) per FTE student have dropped by about 18% over the past two years. Other SUS analyses show that faculty salary averages are losing their competitiveness with respect to salaries in other states.

Recommendation: The consensus formula should include faculty salary averages and other funding rates that are based on achieving the state's goals for maintaining a competitive university system.

Topic 1.7: Impact of Lump-Sum Flexibility on the Funding Process

Synopsis of Issue: The 1991 legislative session granted much greater authority to the Board of Regents to allocate funds among program components and across budgetary units in the SUS. Under the new lump sum flexibility provisions, the SUS is accountable to the Legislature for only two broad program components in the former E&G budget entity: (1) instruction and research and (2) university support programs. During a transitional period, however, the Regents still use the nine former program components for allocating and monitoring the appropriation. Use of these same nine program

components are an implicit feature of the NFM. With the newly gained lump-sum flexibility, some SUS budget personnel question whether the original program components still have utility in a formula funding process.

Documentation: Formulas in other states with complete lump sum flexibility use detailed components, e.g., library and plant, to justify the budget request. These states also use detailed formulas to assure an equitable allocation. Analyses show that some of the NFM funding components involve insignificant dollar amounts and range in size from less than one-tenth of 1% to more than one-half of the E&G budget.

Recommendation: The new consensus formula development process should continue to provide for detailed program components for major program activities. However, the consensus formula should combine funding components which attract relatively small proportions of total funding and which are allocated using similar variables, e.g., FTE students.

9.2 Equity of the SUS Allocation Process

Topic 2.1: Hold Harmless Policy

Synopsis of Issue: When the SUS was developing the NFM, it became apparent that the full and immediate implementation of the formula recommendations would create a significant level of financial disruption for at least one of the universities (FAMU). Recognizing that stability of funding, as well as funding equity, was a desirable characteristic for any funding methodology to possess, the SUS recommended that the NFM include a "hold harmless" provision. Due to the limited amount of new funding that has been appropriated since the NFM was adopted and the extent that the NFM would redistribute funding among the universities, the hold harmless provision has been much more significant in recent allocations than the formula components of the NFM. At issue is how much stability should be afforded at the expense of creating inequities for other universities. Also at issue is whether funding stability guarantees should be for an indefinite period or be limited to a certain phase-out period.

Documentation:Analyses show that a significant portion of FAMU's funding in 1990-91 could not be based on either formula generation or other special allocations. At least 15% of its allocation probably can be attributed to the hold harmless provisions of the NFM.

Recommendation:Policies supporting the new consensus formula should continue to respond to the need for funding stability, but major adjustments in funding should be based on a three-year phase-out approach.

Topic 2.2: Variances Between Planned and Actual Enrollments

Synopsis of Issue: Beginning in the early 1980s, funding decisions began to be made on the basis of "planned enrollment" rather than the actual number of students that would be served. Enrollment plans are intended to communicate to the universities the need to preserve quality rather than to compete for enrollment growth. The enrollment planning process has evolved over the years to provide direction for where (both locations and programs/levels) changes in enrollment levels should occur. UF, for instance, was authorized by the Legislature to reduce 1,500 lower division FTE without loss of funding. Universities face many difficulties in matching their actual enrollments with the plan (e.g., the articulation agreement guarantees access regardless of the plan, and the fact that admissions decisions are made before the final enrollment plan is adopted). Also, enrollment plans have not been universally accepted by the universities due both to their desire to respond to the growth in student demand and the aspirations of some universities to grow. By not providing funding for students beyond the planned levels, the Legislature and BOR penalize the universities for violating state enrollment growth policy. Unfortunately, students rather than administrators feel the brunt of the penalties since they must endure larger class sizes and fewer support services than their SUS peers.

Documentation: Analyses show that all nine universities exceeded their enrollment plans for 1990-91. Three universities were more than 10% over their target (one was 20%). Overall, the nine universities had 6.4% of their combined enrollments unfunded.

Recommendation: The concepts behind the enrollment planning process need to be re-examined in light of the growth pressures facing the university system. Penalties for exceeding the planned target, other than withholding financial support, should be adopted.

Topic 2.3: Realignment of I&R Formula Positions with Actual or Planned Enrollments

Synopsis of Issue: When the enrollment planning policies were first implemented in the early 1980s, several universities exceeded their targets beyond an acceptable corridor of variance. To penalize these institutions, the appropriation bill contained proviso that prevented those universities from receiving funding for this unauthorized enrollment increment in subsequent years. The enrollment plans were adjusted upward to match the actual enrollments but no additional funds were provided. Since then, the formula has provided funding for further enrollment growth but the increment of growth in the early 1980s has never been funded. Other universities lost enrollment during this same period. Their planned enrollment levels were reduced to actual levels without the loss of funding, yet subsequent growth has attracted new funding. As a result, current planned enrollments for several of the universities are either over or under-funded in comparison to the NFM student-faculty ratios.

Documentation: A simulation of the NFM using planned enrollments shows that some universities are underfunded by as much as 5% of their formula-generated positions due to past administration of the enrollment plan.

Recommendation: In coordination with review of the hold harmless policy and the overall enrollment planning concept, the new consensus formula should be zero-based and restore all formula-generated I&R positions.

Topic 2.4: Rationale for Appropriation/Allocation of Non-Enrollment Positions

Synopsis of Issue: Over the years, a significant number of academic and support positions and dollars have been appropriated and allocated to the universities above and beyond the formula-generated levels. The purposes for these resources are varied, but include maintaining major research centers, establishing the quality improvement program, providing start-up funds for new programs, and a host of minor issues. The common rationale for these funding actions is that the enrollment formula did not recognize a special need.

Documentation: Overall, non-enrollment positions accounted for over 17% of all academic positions in 1990-91. Of the 1,276 non-enrollment-related academic positions in the SUS, 430 are categorized with institutes and centers, 639 are funded for quality improvement efforts, 43 are for technical adjustments, and 165 are for short-term program development. Nearly two-thirds of the special position line items are for small increments (e.g., five or fewer academic positions) and represent only about 1% of the total positions at the universities.

Recommendation: The criteria for what constitutes a special, non-enrollment-related funding requirement need to be tightened and funding should be continued only for unique, large-scale activities. In particular, the criteria should address the relative magnitude of the special need in comparison to the university's resource base and whether state-level designation is appropriate. Positions related to special allocations that are to be discontinued should be considered in the establishment of new student-faculty ratios.

Topic 2.5: Alignment of Faculty Salary Averages with Peer Universities

Synopsis of Issue: One feature of the I&R formula of the NFM provides for a unique faculty salary average for each university. These salary averages, which ranged from $47,418 to $55,941 in 1990-91, are intended to reflect the different staffing needs of the universities as they carry out missions with different graduate education and research emphases. Observers from all sides feel that the faculty salary differentials are unfair. Supporters of the universities at the lower end of the salary range feel they are being shortchanged, while advocates of the universities with higher average rates believe that the salary differences do not adequately reflect the different market place in which they compete for faculty.

Documentation: Analyses of regional and national faculty salary studies show that average faculty salaries vary with institutional mission, and universities with the biggest graduate programs pay the highest salaries. In comparison to similar universities by category in the SREB states, Florida's universities ranged from 91% to 109% of their peer category averages. In a similar comparison using national data for three categories of

universities from the AAUP survey, the range was from 91% to 119%. In both cases, Florida universities that have the most graduate emphasis were the least competitive.

Recommendation: The new consensus formula should continue to differentiate faculty salary averages among the universities. The initial values in the consensus formula should be recalibrated using external comparative data for similar institutions across the nation, and the values should be reviewed periodically.

Topic 2.6: Funding Provisions for the Needs of "High-Risk" Students

Synopsis of Issue: Various features of the NFM provide differential funding based on identified differences in missions among the universities. Examples include such student characteristics as level, discipline, and part-time enrollment status. One feature of the student services funding formula provides an additional 10% to FAMU based on its mission to serve disadvantaged students. No other university receives this supplement regardless of the number of disadvantaged students they serve. FAMU also is the only university that is statutorily able to offer remedial or developmental instruction, but these courses are not eligible for formula funding. The funding process for elementary-secondary education (FEFP) provides supplemental funding for "at-risk" students, and is targeted at dropout prevention efforts and students whose native language is other than English. The basic issue regarding the SUS funding process is whether "high-risk" students impose significantly different resource requirements and, if so, how should their needs be recognized.

Documentation: The ability to identify and count the number of "high-risk" students from readily available data sources is limited. However, using scores on standardized entrance exams, high school grade point averages, and financial aid participation rates as proxy measures, our analysis shows that FAMU's student body includes the highest proportion of "high-risk" students. Considerable variance is observed among the other eight universities.

Recommendation: The new consensus formula should define "high-risk" students and recognize their needs in both the instruction and student services components. All universities should be eligible to receive these supplements in proportion to their service to "high-risk" students.

Topic 2.7: Funding Equity Between E&G and Special Unit Programs

Synopsis of Issue: Prior to the 1991-92 appropriation, the agricultural and medical-related units at UF and USF were funded by the Legislature as "special unit" budget entities rather than through the E&G appropriation. A specific charge in the legislative proviso to PEPC was to consider the equity of funding for comparable programs provided through the special unit and E&G funding processes. Our analyses focused on agriculture and pharmacy, but the issue also extends to nursing and a variety of other programs in the health-related professions. With the 1991-92 appropriation, the special

unit budget entities were discontinued but the special units continue to be separately identified as special line-item components.

Documentation: The NFM recommendations for special units, which were never adopted by the Legislature, specifically provided preferential funding treatment for instructional programs at IFAS, the UF Health Center, and the USF Health Center. Analyses of SUS expenditure data for agriculture instruction show that FAMU spends more per student than IFAS, perhaps due to institutional priorities at FAMU. (The comparisons do not include the experiment station or extension service at IFAS.) Comparisons of budget data for pharmacy show slightly higher per-student expenditures at UF than FAMU.

Recommendation: With the elimination of special unit budget entities, the agriculture and health-related instructional programs at UF and USF should be funded at similar rates to comparable instructional programs in the E&G budget. In the development of the consensus formula, however, careful attention should be directed to the assignment of these disciplines into appropriate funding categories.

Topic 2.8: Provisions in the Library Resources Formula for Unmet Needs

Synopsis of Issue: The NFM library formula, which is derived from a formula developed in the state of Washington, contains two separate provisions -- operations (mostly personnel costs) and resources (books and subscriptions). The resources formula element focuses on maintenance of the collection and is largely driven by the size of the current materials inventory, although occasional special allocations are available to provide for the needs of new programs. The implicit assumption in this process is that the existing library inventories already are equitable with respect to the variance in program needs of the universities. The formula contains no provisions (other than new program supplements) to address possible deficiencies in library collections. University library standards developed by professional groups (e.g., ACRL) and state higher education boards elsewhere prescribe volumes of resources needed per program by level, per student and per faculty.

Documentation: Analyses show that current library resources per FTE student vary considerably (more than 125%) across the nine universities. This variance is believed to result from a variety of factors, including program and mission differences, institutional priorities, and timing (e.g., whether the SUS had sufficient resources when the university either opened or experienced significant programmatic expansion or enrollment growth).

Recommendation: The new consensus formula for the library component should specifically include provisions to identify resource needs related to different academic missions.

Topic: 2.9 Number of Discrete Formula Categories

Synopsis of Issue: The NFM contains many components and sub-elements that attempt to address the different needs of the nine universities. In the student services component, for instance, sub-elements consider part-time students, disadvantaged students, and students that receive need-based financial aid. In the I&R program component, separate research staffing ratios are used for each individual discipline although the 32 disciplines are grouped into only three categories for instruction. Four of the program components include special provisions for the needs of branch campus programs. The issue is whether the need for a simpler formula presentation, which would facilitate communication among university system personnel and funding authorities, outweighs the needs to recognize relatively subtle differences in mission with procedures that redistribute relatively few dollars.

Documentation: Analyses show that four of the nine separate formula components of the NFM collectively account for only 2.8% of the total E&G appropriation. Even for the universities that are the principal beneficiaries of these special provisions, the four components combined do not generate more than 5% of total funding.

Recommendation: The new consensus formula should consolidate the number of separate sub-elements where possible. Separate categories that are created should be consistent with the lump sum flexibility components and should represent a significant dollar volume of resources.

Topic: 2.10 Unique Missions Not Addressed by the Formula

Synopsis of Issue: The purpose of the overall funding process is to distribute available resources in proportion to identified need. Many states find that formulas for colleges and universities are useful for measuring relative need for all but a few unique programs. The NFM follows the national pattern with the formula elements covering about 84% of the total E&G budget. The issue regarding formula recognition is two-fold. One aspect is whether any of the existing non-formula provisions should be rolled into an existing formula or become the basis for a new formula component. The second aspect is whether certain missions, which currently are not being separately recognized, should be given greater visibility in the state-level budgeting process.

Documentation: The non-formula allocations in the 1990-91 budget include $3.5 million for museums (UF and FAMU), $3.2 million for radio and television stations (UF, FSU, USF and UWF), $9.4 million for demonstration schools (shifted to the FEFP budget for 1991-92), and $139 million for a variety of special, non-enrollment positions spread across all nine universities.

Recommendation: The new consensus formula should seek to include as few non-formula components as possible. At the same time, nonetheless, the new formula should contain new formula categories that recognize significant and costly mission differences.

9.3 Equity of the Fixed Capital Outlay Budgeting Process

Topic 3.1: Use of Space Planning Standards in the Capital Outlay Budget

Synopsis of Issue: Facilities used by colleges and universities across the nation are classified according to their type of space. Separate reporting categories include such areas as classrooms, teaching labs, offices, and library space. About two-thirds of the states rely on space planning guidelines, such as providing 120 square feet per office or requiring 40 hours of classroom utilization per week, to determine the relative needs of their institutions for facilities construction and renovation. Florida adopted space planning standards approximately twenty years ago when the system was rapidly expanding. In recent years, however, formula-based estimates of facility needs have not played a central role in the development of SUS capital outlay budgets. A SUS task force recommended adoption of a revised space planning/facilities budgeting formula several years ago, but no action was taken.

Documentation: Our analyses show a considerable variation of net quantitative square feet per FTE student in total and by type of space. A 1989 work paper prepared by SUS staff indicates that the universities vary from 62% to 107% of formula-estimated space needs that were met. Our analyses of recent capital outlay allocations for new construction and major renovation show little relation to unmet facilities needs.

Recommendation: The SUS should place greater emphasis on the use of objective space planning guidelines and formulas in the development of its capital outlay budgets.

Topic 3.2: Space Planning Standards that Reflect Trends in Program Needs

Synopsis of Issue: A familiar precept in facilities planning is that "form follows function." That is, space should be planned to respond to the specific intended uses. Higher education space planning standards have attempted to respond to this principle by having separate formulas for each of several types of space. For instance, classroom and research laboratory space standards often vary by discipline. Most formulas were developed in the late 1960s and early 1970s when enrollments were rapidly expanding as the baby boom generation reached college age. Over the past twenty years, the nature of colleges and universities has changed considerably with more part-time students, larger class sizes, the advent of computer technology for instruction, research and library services, new health and safety regulations, etc. The issue is whether 1970-era space planning standards continue to match the functions of the university in the 1990s. The problem is especially acute in planning for medical education facilities.

Documentation: The three tiers of the California higher education community joined several years ago to reconsider the appropriateness of that state's space planning standards. Research space allowances and classroom utilization standards were particular concerns. Higher education facilities planning also is receiving renewed attention at the federal level.

Recommendation: The SUS should revise its space planning standards to take into account the changes in program delivery methods that have taken place over the past 20 years.

Topic 3.3: Planning for Facilities to Accommodate Projected Enrollment Growth

Synopsis of Issue: The number of Florida high school graduates is projected to expand significantly over the coming decade. Both the community colleges and the SUS are preparing to deal with an expected surge of students. Also during the past couple of years, PEPC and the SUS have become concerned about the overall low participation rates in baccalaureate and graduate level education in Florida in comparison to other states. One response to this concern is the plan to build a new university in southwest Florida. If the SUS receives funding to respond to both the increase in high school graduates and to achieve higher participation rate goals, university enrollments will grow by over 50,000 students. This level of enrollment growth will have considerable impact on the need for new facilities.

Documentation: The 1991 PEPC report on criteria for new colleges and universities suggested that SUS enrollments should grow by 48% over the next thirty years. Using the average net assignable square feet per FTE student at the three newest SUS campuses, analyses show that 4.5 million square feet of additional space, at an estimated cost of nearly $500 million, would be required to handle this enrollment growth.

Recommendation: The SUS needs to develop a long-range program to provide space for the projected growth in enrollment demand. The program should require efficient space planning standards, consider the relative priority between instructional space and research and support space, and address the relative priority between new construction and renovation.

Topic 3.4: Consolidation of Capital Outlay Funding Sources

Synopsis of Issue: Funding for SUS capital outlay projects comes from several different sources, including the Public Education Capital Outlay (PECO) Trust Fund created by utility taxes, the General Revenue Fund, the Educational Enhancement Trust Fund (the lottery) and a portion of student fees which is designated for facilities. Different planning and budgeting procedures are followed depending on the source of funds and the type of facility. Compared to the considerable review devoted to creating priority lists for PECO, general revenue and lottery funded projects, student fee-funded projects are regarded more as institutional prerogatives. For the E&G budget, most student fees are combined with the general revenue and lottery appropriations for distribution among the nine universities according to system-wide priorities. The issue is whether the student fee funding source should be considered available to address broader statewide priorities.

Documentation: Our analyses indicate that about 23% of total SUS capital outlay funds in recent years have come from student fees. Also, funding has tended to stay on the campus where it was collected regardless of system-wide priorities.

Recommendation: All general sources of capital outlay funds in the SUS should be consolidated and allocated according to system-wide priorities for all types of space.

10.0 APPENDICES

10.0 APPENDICES

10.1 Historical Analysis of Funding Variations

The legislative proviso requested that data from several years be reviewed as a background for the analysis of the equity of the 1990-91 allocation. For this purpose, we selected two other fiscal years -- FY81 and FY86 -- in order to consider funding shifts within the State University System over five-year periods from FY81 to FY91.

Our analysis of these two earlier fiscal periods includes various calculations of funding per FTE student. In particular, we analyze per-student funding for each of the nine major budget components (e.g., instruction, library, etc.) and the total for each university and for the system average. Separate calculations were performed using both planned and actual FTE enrollments. It should be noted that a variety of allocation practices have been used over the ten-year period. The NFM applies only partially to the FY91 allocation, and pre-dates the FY81 and FY86 allocations.

Exhibit 37 is a summary comparison of the three fiscal years. It shows how total funding for each university varied from the system average on both the planned and actual enrollment bases. Exhibits 38, 39 and 40 provide details by program components for FY81, FY86 and FY 91, respectively. A variety of factors may explain the shifts over time, including different mixes of students by level (several universities added lower divisions during this period) and growth in the institutes and centers category.

EXHIBIT 37

VARIATION IN FUNDING PER FTE STUDENT: FY81, FY 86, AND FY 91
ACTUAL FTE AND PLANNED FTE

	Actual FTE			Planned FTE		
University	FY81	FY86	FY91	FY81	FY86	FY91
UF	93%	92%	119%	94%	96%	113%
FSU	109%	119%	98%	109%	114%	100%
FAMU	115%	133%	102%	109%	132%	115%
USF	89%	90%	101%	88%	90%	95%
FAU	110%	105%	119%	112%	101%	113%
UWF	113%	115%	95%	112%	105%	91%
UCF	87%	81%	75%	89%	79%	79%
FIU	107%	94%	84%	105%	97%	92%
UNF	113%	95%	84%	114%	101%	84%
SUS Average	100%	100%	100%	100%	100%	100%

EXHIBIT 38

SUMMARY ALLOCATION OF FY81 APPROPRIATION BY UNIVERSITY, ALLOCATION COMPONENT AND STUDENT

Allocation Component	UF	FSU	FAMU	USF	FAU	UWF	UCF	FIU	UNF	SUS
	Dollars per Actual FTE Student									
FTE Students	*22,080*	*15,108*	*3,834*	*14,801*	*4,438*	*3,474*	*7,814*	*6,780*	*2,587*	*80,896*
I&R	2 807	3 090	2 639	2 582	3 000	2 770	2 331	2 802	2 683	2 733
Institutes and Centers	55	45	16	39	48	102	247	69	0	89
Plant Operations & Mainten	626	645	954	485	650	707	425	586	627	602
Administrative Services	480	591	923	512	629	871	552	769	1 000	601
Radio and TV Stations	19	35	0	39	0	38	0	0	0	21
Libraries	200	274	266	216	370	414	213	342	458	260
Museums	80	0	0	0	0	0	0	0	0	16
Laboratory Schools	56	85	178	0	102	0	0	0	0	45
Student Services	143	175	213	142	188	205	185	260	357	176
Total	4 226	4 939	5 189	4 014	4 987	5 108	3 934	4 828	5 125	4 523
	Variation from SUS Average in Dollars per FTE Student									
I&R	-5%	13%	-3%	-6%	10%	1%	-15%	3%	-2%	0%
Institutes and Centers	-21%	-35%	-78%	-44%	-31%	47%	256%	-1%	-100%	0%
Plant Operations & Mainten	4%	7%	58%	-20%	8%	17%	-29%	-3%	4%	0%
Administrative Services	-23%	-2%	54%	-15%	5%	45%	-8%	28%	66%	0%
Radio and TV Stations	-7%	66%	-100%	92%	-100%	85%	-100%	-100%	-100%	0%
Libraries	-23%	5%	2%	-17%	43%	59%	-18%	32%	76%	0%
Museums	267%	-100%	-100%	-100%	-100%	-100%	-100%	-100%	-100%	0%
Laboratory Schools	24%	88%	295%	-100%	126%	-100%	-100%	-100%	-100%	0%
Student Services	-19%	0%	21%	-19%	7%	17%	-8%	48%	103%	0%
Total	-7%	9%	15%	-11%	10%	13%	-13%	7%	13%	0%
	Dollars per Planned FTE Student									
FTE Students	*21,770*	*15,059*	*4,007*	*14,972*	*4,345*	*3,487*	*7,814*	*6,884*	*2,587*	*80,885*
I&R	2 841	3 100	2 525	2 552	3 064	2 780	2 392	2 766	2 704	2 740
Institutes and Centers	56	45	16	39	49	102	254	68	0	70
Plant Operations & Mainten	635	647	913	479	664	705	438	579	632	604
Administrative Services	468	593	883	506	642	868	567	759	1 007	602
Radio and TV Stations	19	35	0	39	0	38	0	0	0	21
Libraries	203	274	254	213	378	412	219	338	462	260
Museums	61	0	0	0	0	0	0	0	0	16
Laboratory Schools	57	86	170	0	104	0	0	0	0	45
Student Services	145	176	204	140	192	205	188	257	360	177
Total	4 283	4 966	4 966	3 988	5 093	5 089	4 037	4 789	5 164	4 535
	Variation from SUS Average in Dollars per FTE Student									
I&R	-4%	13%	-8%	-7%	12%	1%	-13%	1%	-1%	0%
Institutes and Centers	-20%	-35%	-78%	-44%	-29%	46%	266%	-3%	-100%	0%
Plant Operations & Mainten	5%	7%	51%	-21%	10%	17%	-28%	-4%	5%	0%
Administrative Services	-23%	-1%	47%	-16%	7%	44%	-6%	26%	67%	0%
Radio and TV Stations	-6%	66%	-100%	90%	-100%	84%	-100%	-100%	-100%	0%
Libraries	-22%	5%	-2%	-18%	45%	58%	-19%	30%	77%	0%
Museums	271%	-100%	-100%	-100%	-100%	-100%	-100%	-100%	-100%	0%
Laboratory Schools	25%	88%	277%	-100%	130%	-100%	-100%	-100%	-100%	0%
Student Services	-18%	0%	16%	-21%	9%	16%	-4%	46%	104%	0%
Total	-6%	9%	9%	-12%	12%	12%	-11%	5%	14%	0%

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EXHIBIT 39

SUMMARY ALLOCATION OF FY86 APPROPRIATION BY UNIVERSITY, ALLOCATION COMPONENT AND STUDENT

Allocation Component	UF	FSU	FAMU	USF	FAU	UWF	UCF	FIU	UNF	SUS
	Dollars per Actual FTE Student									
FTE Students	*23,269*	*14,589*	*3,489*	*15,269*	*5,251*	*3,379*	*9,300*	*8,547*	*3,082*	*86,180*
I&R	4 221	5,597	4 976	4 257	4 767	4 764	3 541	4 353	3 175	4 513
Institutes and Centers	171	96	10	70	0	67	264	40	61	115
Plant Operations & Mainten	858	1 024	1 706	749	990	1 091	589	729	746	873
Administrative Services	533	811	1 464	725	779	1 075	800	802	1 851	815
Radio and TV Stations	26	43	2	59	0	56	0	0	0	27
Libraries	327	444	505	352	561	736	319	443	496	414
Museums	76	0	9	0	0	0	0	0	0	21
Laboratory Schools	78	128	263	0	125	0	0	0	0	61
Student Services	250	297	516	204	242	364	238	307	394	274
Total	6 539	8 440	9 451	6 415	7 463	8 153	5 751	6 673	6 724	7 113
	Variation from SUS Average in Dollars per FTE Student									
I&R	-6%	24%	10%	-6%	6%	6%	-22%	-4%	-30%	0%
Institutes and Centers	49%	-16%	-91%	-39%	-100%	-42%	130%	-65%	-47%	0%
Plant Operations & Mainten	-2%	17%	96%	-14%	13%	25%	-33%	-17%	-15%	0%
Administrative Services	-35%	-1%	80%	-11%	-4%	32%	-2%	-2%	127%	0%
Radio and TV Stations	-2%	58%	-92%	117%	-100%	106%	-100%	-100%	-100%	0%
Libraries	-21%	7%	22%	-15%	35%	78%	-23%	7%	20%	0%
Museums	264%	-100%	-58%	-100%	-100%	-100%	-100%	-100%	-100%	0%
Laboratory Schools	27%	110%	332%	-100%	106%	-100%	-100%	-100%	-100%	0%
Student Services	-9%	8%	88%	-26%	-12%	33%	-13%	12%	44%	0%
Total	-8%	19%	33%	-10%	5%	15%	-19%	-6%	-5%	0%
	Dollars per Planned FTE Student									
FTE Students	*22,734*	*15,485*	*3,572*	*15,529*	*5,521*	*3,783*	*9,669*	*8,374*	*2,904*	*87,548*
I&R	4 320	5 272	4 874	4 191	4 534	4 278	3 406	4 442	3 348	4 442
Institutes and Centers	175	90	10	69	0	60	253	41	65	113
Plant Operations & Mainten	878	965	1 672	738	842	980	566	744	787	860
Administrative Services	545	764	1 434	714	741	966	769	819	1 951	802
Radio and TV Stations	27	40	2	56	0	50	0	0	0	27
Libraries	334	419	495	347	533	661	307	452	523	408
Museums	78	0	9	0	0	0	0	0	0	21
Laboratory Schools	79	121	257	0	119	0	0	0	0	60
Student Services	256	280	506	200	230	327	229	313	415	270
Total	6,693	7,950	9,258	6,317	7,098	7,321	5,531	6,811	7,089	7,002
	Variation from SUS Average in Dollars per FTE Student									
I&R	-3%	19%	10%	-6%	2%	-4%	-23%	0%	-25%	0%
Institutes and Centers	55%	-20%	-91%	-39%	-100%	-47%	124%	-64%	-43%	0%
Plant Operations & Mainten	2%	12%	94%	-14%	10%	14%	-34%	-13%	-8%	0%
Administrative Services	-32%	-5%	79%	-11%	-8%	20%	-4%	2%	143%	0%
Radio and TV Stations	1%	51%	-92%	117%	-100%	86%	-100%	-100%	-100%	0%
Libraries	-18%	3%	21%	-15%	31%	62%	-25%	11%	28%	0%
Museums	279%	-100%	-56%	-100%	-100%	-100%	-100%	-100%	-100%	0%
Laboratory Schools	32%	101%	329%	-100%	98%	-100%	-100%	-100%	-100%	0%
Student Services	-5%	4%	87%	-26%	-13%	21%	-15%	18%	54%	0%
Total	-4%	14%	32%	-10%	1%	9%	-21%	-3%	1%	0%

EXHIBIT 40

SUMMARY ALLOCATION OF FY91 APPROPRIATION BY UNIVERSITY, ALLOCATION COMPONENT AND STUDENT

Allocation Component	UF	FSU	FAMU	UBF	FAU	UWF	UCF	FIU	UNF	SUS
	Dollars per Actual FTE Student									
FTE Students	*22,030*	*19,020*	*5,780*	*17,043*	*6,589*	*4,513*	*12,284*	*12,659*	*4,183*	*104,081*
I&R	8,229	8,688	8,185	8,796	7,736	5,671	5,056	5,552	4,981	6,573
Institutes and Centers	230	86	9	125	6	79	273	46	72	130
Plant Operations & Mainten	1,236	1,079	1,458	1,076	1,237	1,174	644	782	901	1,052
Administrative Services	803	838	1,175	1,026	1,136	4,146	698	1,062	1,266	953
Radio and TV Stations	43	46	0	86	0	54	0	0	0	31
Libraries	840	544	836	577	1,086	880	496	622	780	837
Museums	157	0	4	0	0	0	0	0	0	33
Laboratory Schools	136	154	332	0	223	0	0	0	0	80
Student Services	561	515	532	525	611	569	440	435	584	521
Total	12,036	9,949	10,313	10,195	12,034	9,576	7,607	8,496	8,523	10,120
	Variation from SUS Average in Dollars per FTE Student									
I&R	25%	0%	-8%	2%	18%	-15%	-24%	-17%	-28%	0%
Institutes and Centers	78%	-34%	-93%	-4%	-95%	-39%	110%	-65%	-44%	0%
Plant Operations & Mainten	17%	3%	39%	2%	18%	12%	-39%	-26%	-14%	0%
Administrative Services	-16%	-12%	23%	8%	19%	20%	-27%	11%	33%	0%
Radio and TV Stations	38%	48%	-100%	121%	-100%	75%	-100%	-100%	-100%	0%
Libraries	1%	-15%	0%	-9%	70%	40%	-22%	-2%	19%	0%
Museums	369%	-100%	-87%	-100%	-100%	-100%	-100%	-100%	-100%	0%
Laboratory Schools	54%	71%	268%	-100%	148%	-100%	-100%	-100%	-100%	0%
Student Services	8%	-1%	2%	1%	17%	7%	-15%	-17%	6%	0%
Total	19%	-2%	2%	1%	19%	-5%	-25%	-16%	-16%	0%
	Dollars per Planned FTE Student									
FTE Students	*21,800*	*17,484*	*4,817*	*17,016*	*6,524*	*4,394*	*10,925*	*10,696*	*3,827*	*97,783*
I&R	8,318	7,274	7,398	8,808	7,813	5,825	5,685	6,450	5,259	7,102
Institutes and Centers	233	93	10	125	6	81	308	53	77	138
Plant Operations & Mainten	1,248	1,174	1,749	1,077	1,249	1,208	724	909	955	1,120
Administrative Services	812	912	1,410	1,027	1,148	1,177	785	1,234	1,341	1,015
Radio and TV Stations	44	50	0	86	0	56	0	0	0	33
Libraries	847	591	785	578	1,095	917	558	722	805	678
Museums	158	0	5	0	0	0	0	0	0	36
Laboratory Schools	140	166	399	0	226	0	0	0	0	86
Student Services	567	561	839	526	617	574	496	505	598	565
Total	12,183	10,823	12,375	10,211	12,154	9,836	8,953	9,873	9,036	10,772
	Variation from SUS Average in Dollars per FTE Student									
I&R	17%	2%	4%	-4%	10%	-18%	-20%	-9%	-26%	0%
Institutes and Centers	69%	-33%	-93%	-9%	-96%	-41%	122%	-62%	-44%	0%
Plant Operations & Mainten	11%	5%	56%	-4%	12%	8%	-35%	-19%	-15%	0%
Administrative Services	-20%	-10%	39%	1%	13%	16%	-23%	22%	32%	0%
Radio and TV Stations	31%	51%	-100%	108%	-100%	69%	-100%	-100%	-100%	0%
Libraries	-5%	-13%	13%	-15%	62%	35%	-18%	7%	19%	0%
Museums	346%	-100%	-86%	-100%	-100%	-100%	-100%	-100%	-100%	0%
Laboratory Schools	46%	73%	315%	-100%	135%	-100%	-100%	-100%	-100%	0%
Student Services	0%	1%	19%	-5%	11%	2%	-11%	-9%	6%	0%
Total	13%	0%	15%	-5%	13%	-9%	-21%	-8%	-16%	0%

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EXHIBIT 41

23-Dec-91

DIFFERENTIAL TREATMENT OF UNIVERSITIES BASED ON POLICIES IN THE SIMULATED ALLOCATION OF 1990-91 E&G APPROPRIATION

Allocation Equity Issue	UF	FSU	FAMU	USF	FAU	UWF	UCF	FIU	UNF	SUS
SUS Average Allocation per Planned FTE Student	$10,705	$10,705	$10,705	$10,705	$10,705	$10,705	$10,705	$10,705	$10,705	$10,705
Allocation Adjustments										
Instructional Program Offerings	171	63	(709)	76	22	(109)	(132)	(51)	(94)	0
Staffing Characteristics	279	209	(280)	(67)	51	(271)	(199)	(267)	(333)	0
Fee Waivers	126	96	(105)	(44)	(36)	(115)	(71)	(105)	(127)	0
Library Characteristics	28	12	120	(75)	104	261	(157)	(75)	154	0
Library New Program Support	(27)	(27)	(27)	12	75	(27)	34	34	(27)	0
Branch Campuses	(15)	(9)	(15)	10	18	11	5	21	(15)	0
Non-Enrollment Appropriations/Allocations	406	16	40	35	26	(431)	(264)	(219)	(748)	0
Unique Operations	177	53	239	(96)	61	(109)	(169)	(165)	(165)	0
Part-Time Students	(29)	(12)	(23)	14	15	9	22	19	33	0
Special Unit Student Services	40	(15)	(15)	0	(15)	(15)	(15)	(15)	(15)	0
Disadvantaged Students	(2)	(2)	47	(2)	(2)	(2)	(2)	(2)	(2)	0
Need-Based Student Financial Aid	21	3	23	6	(37)	(29)	9	(31)	(26)	0
Merit-Based Student Financial Aid	(2)	1	23	(0)	(2)	(3)	(3)	0	(7)	0
Physical Plant Operations and Maintenance	173	(5)	453	6	95	128	(333)	(227)	(267)	0
Administrative Support	12	(22)	116	(55)	142	152	(98)	(58)	155	0
Administrative Support-Special Units	37	(18)	(18)	14	(18)	(18)	(18)	(18)	(18)	0
Hold-Harmless Policies and Other Unexplained Variance	64	(225)	1,803	(330)	951	(301)	(763)	327	(167)	0
Planned Enrollment	(103)	(921)	(2,118)	(11)	(151)	(297)	(938)	(1,413)	(492)	(661)
Adjusted Allocation per Planned FTE	12,060	9,902	10,256	10,200	12,003	9,538	7,615	8,460	8,543	10,044

10.2 Alternative Illustration of Funding Equity Analysis Model

In chapter 5, we illustrated how the various components of the NFM might help explain the funding differences among the universities in a simulated allocation for 1990-91. Exhibit 19 started with actual funding levels and then adjusted for the impact of various formula factors until each university was at the system average. Exhibit 41 uses the same data, but begins with all universities being funded at the system average. The adjustments then show how funding is increased or decreased in response to each university's characteristics as applied to the formula components.